

FIGURE 1

105 →

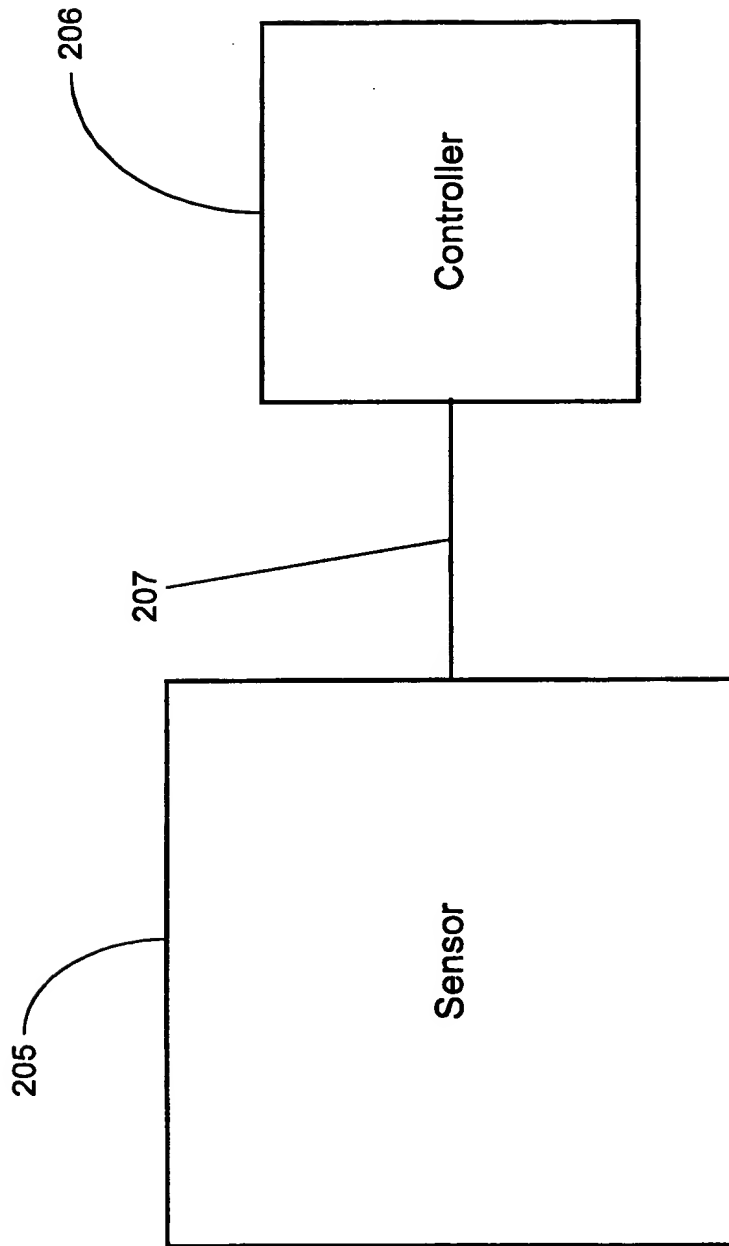


FIGURE 2

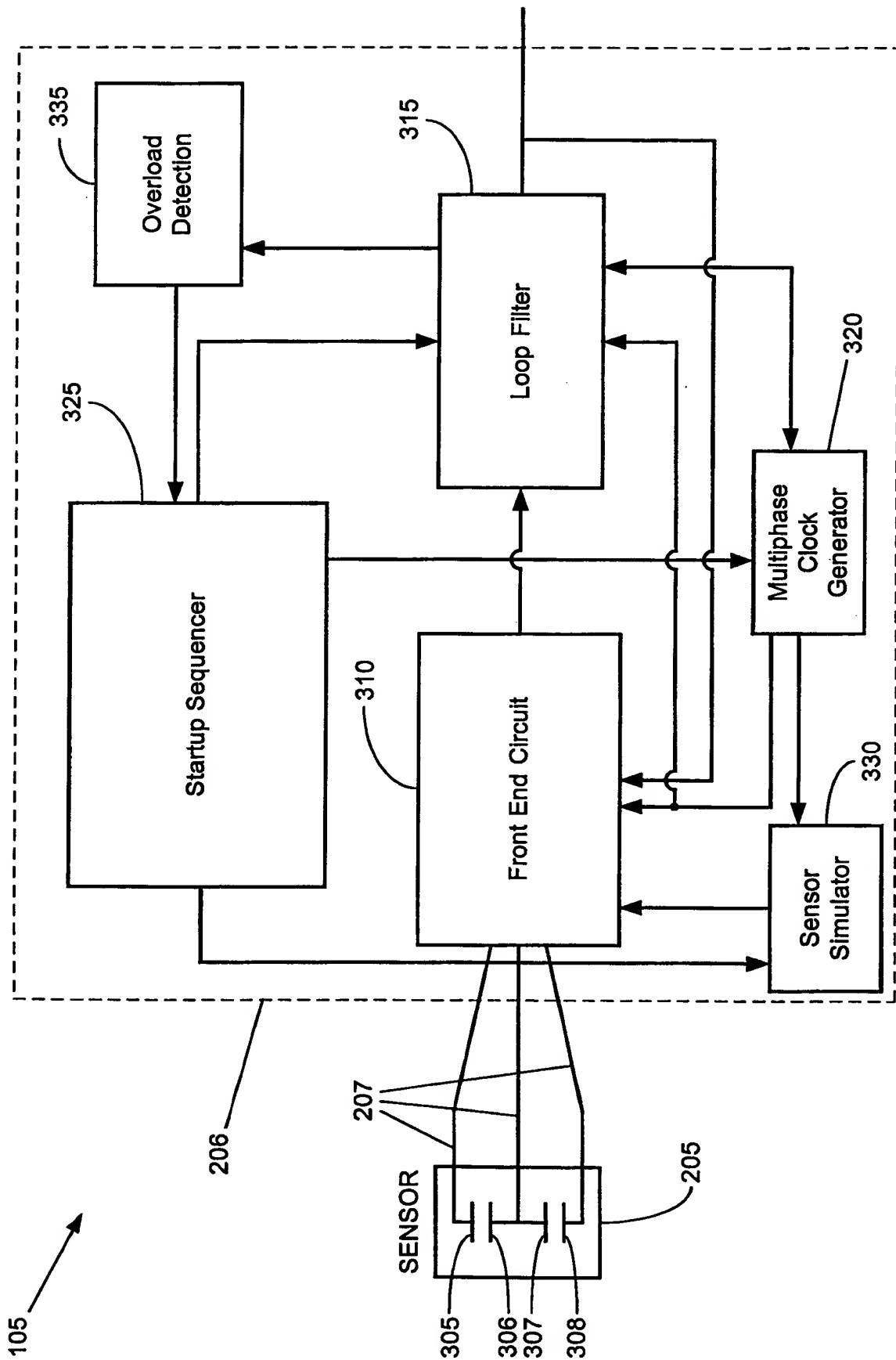


FIGURE 3

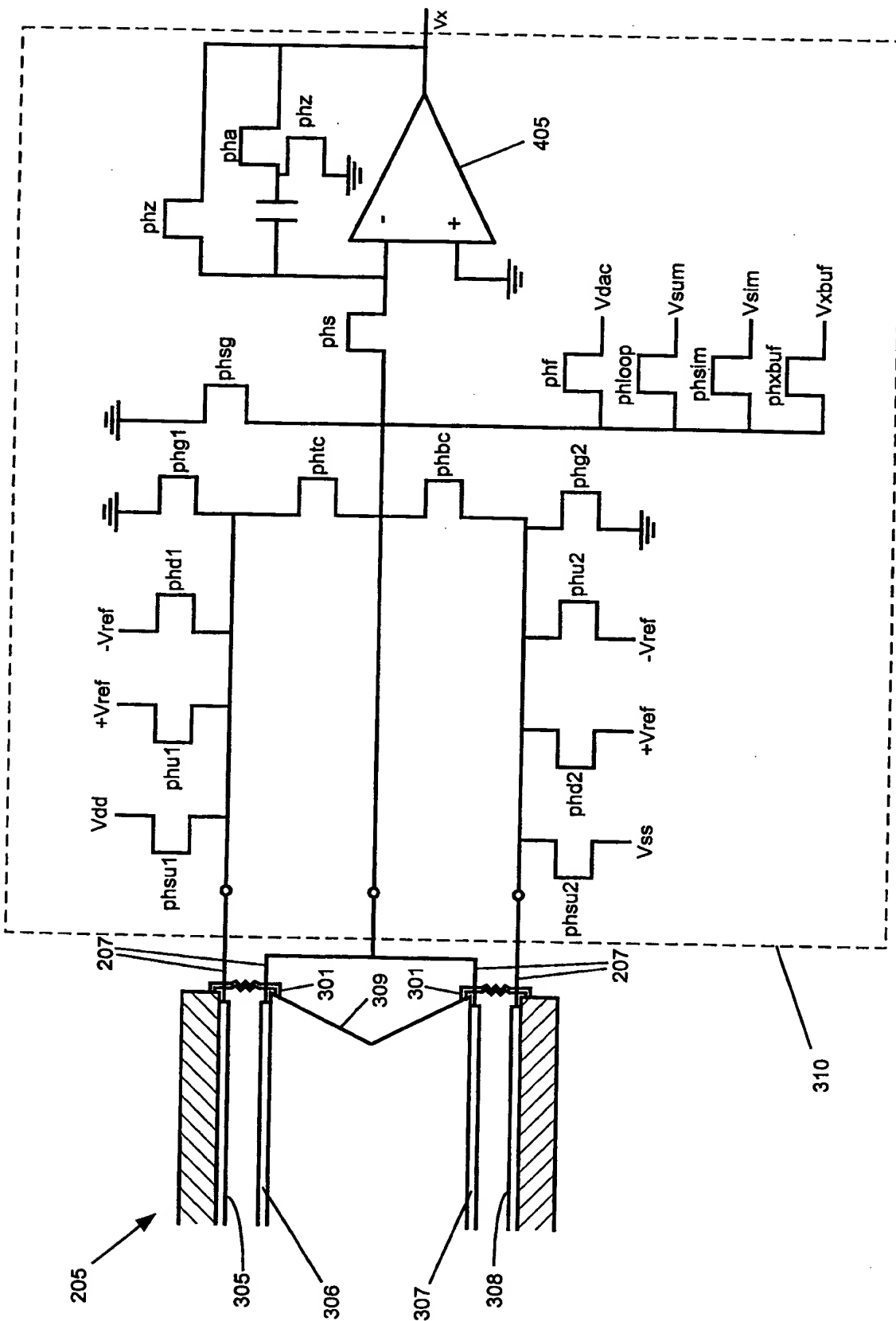


FIGURE 4

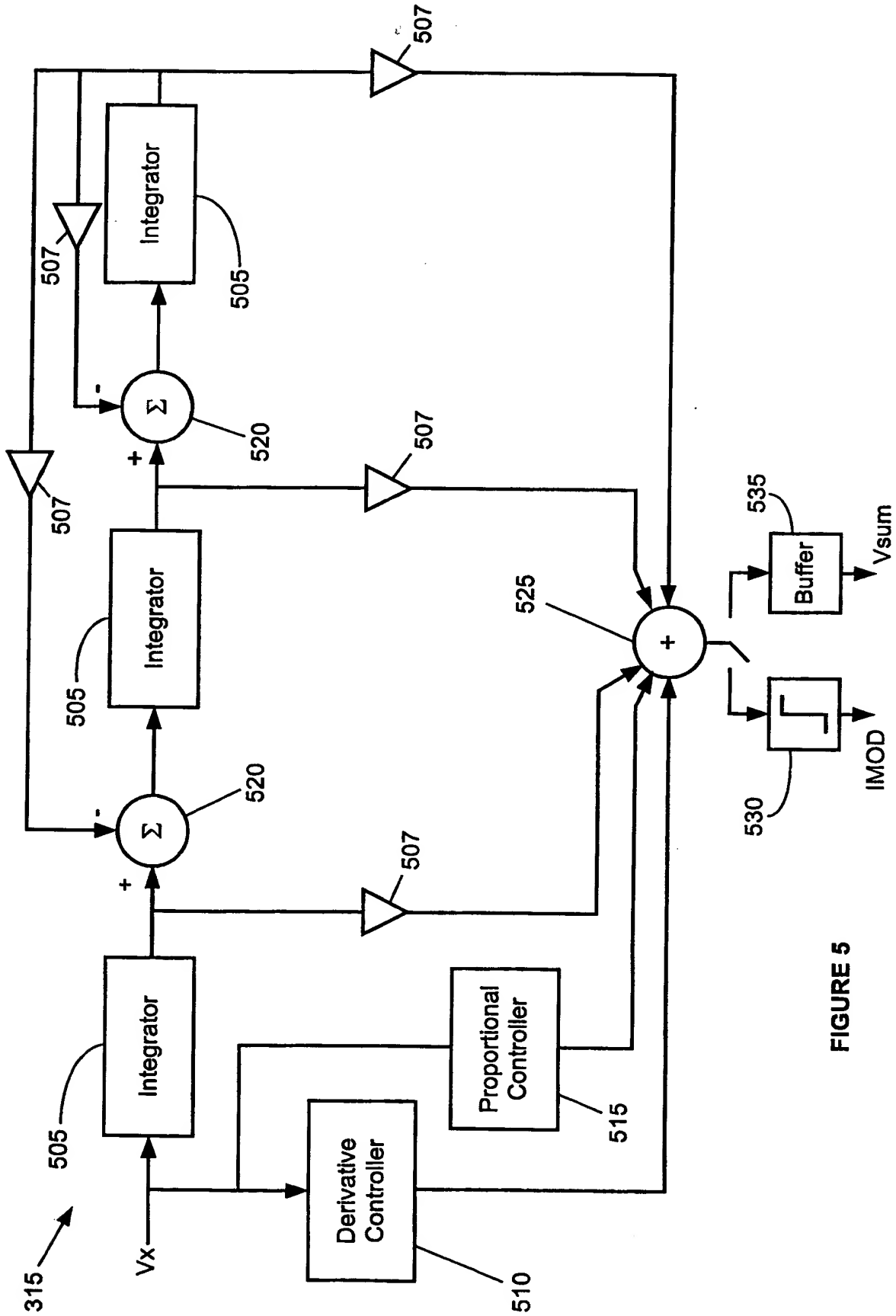


FIGURE 5

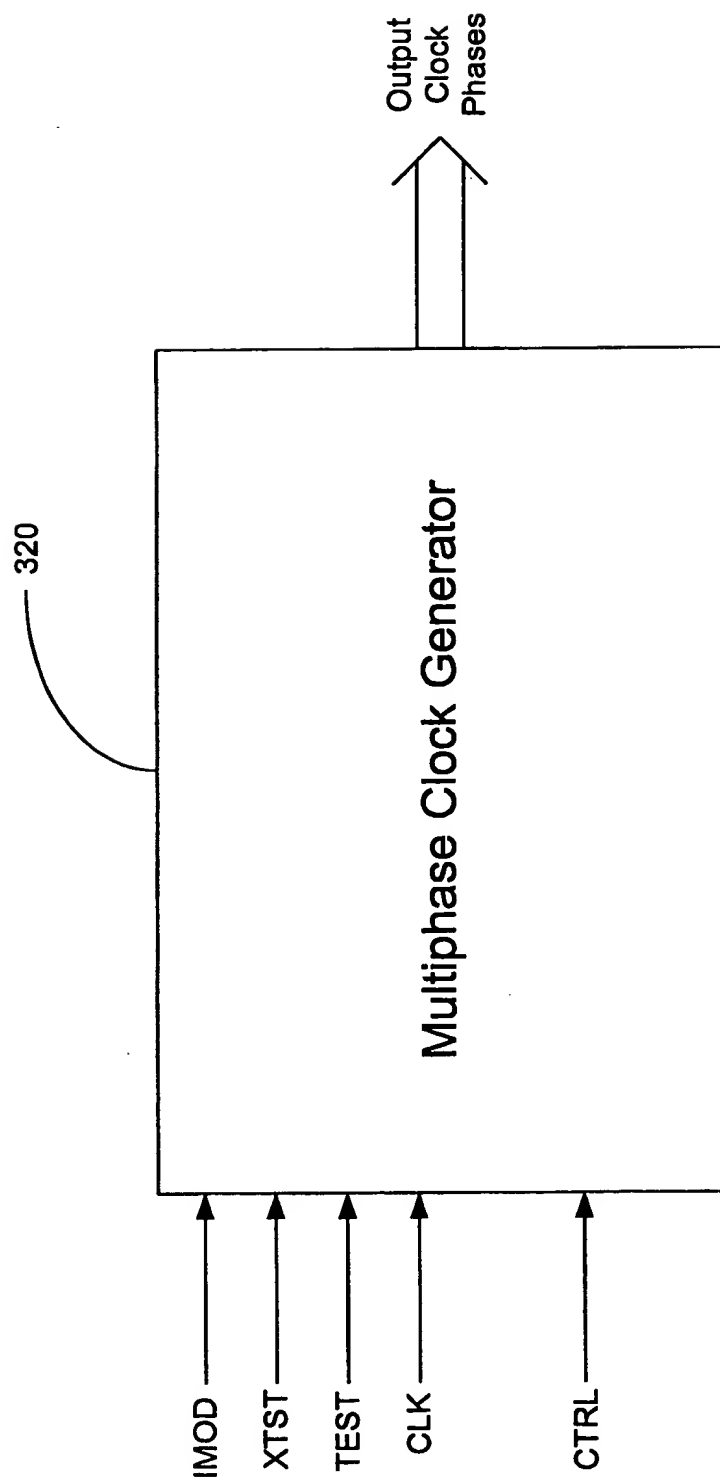


FIGURE 6

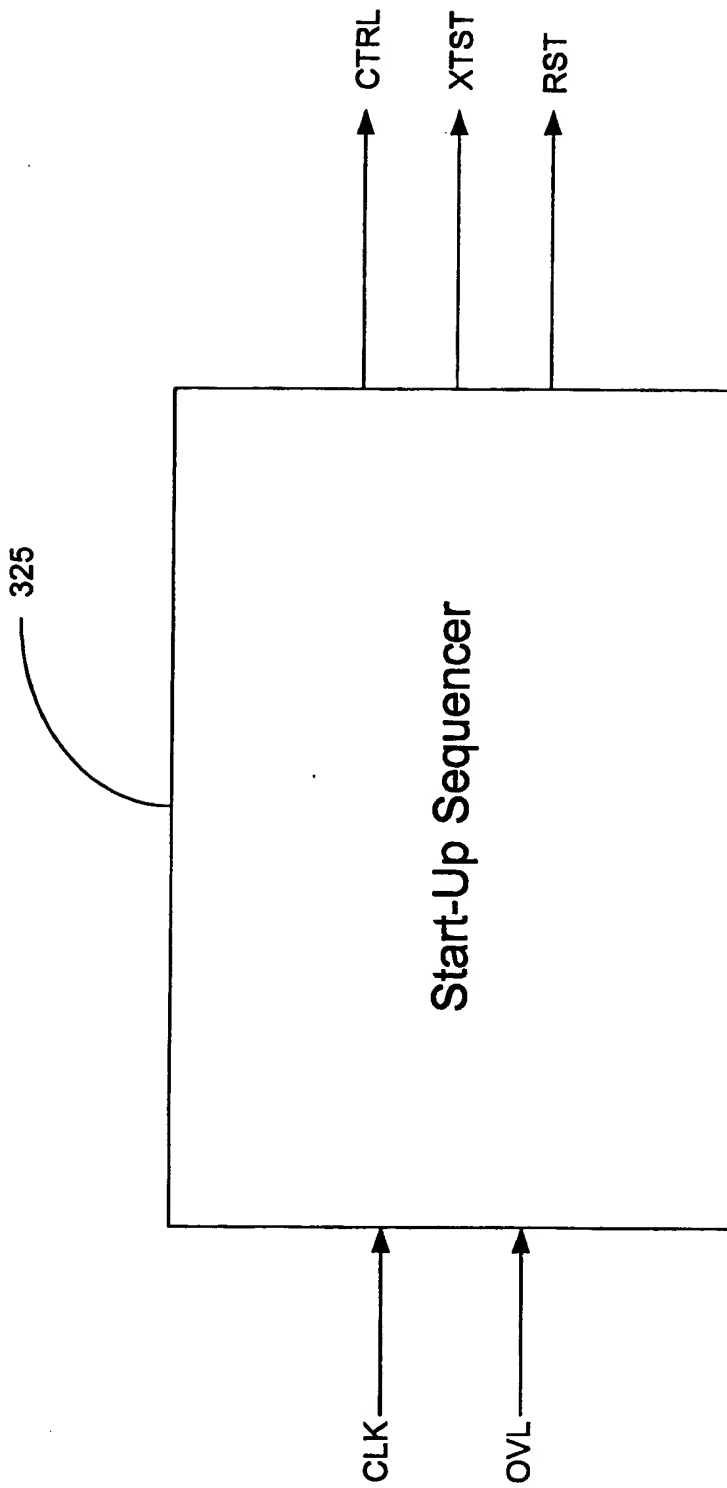


FIGURE 7

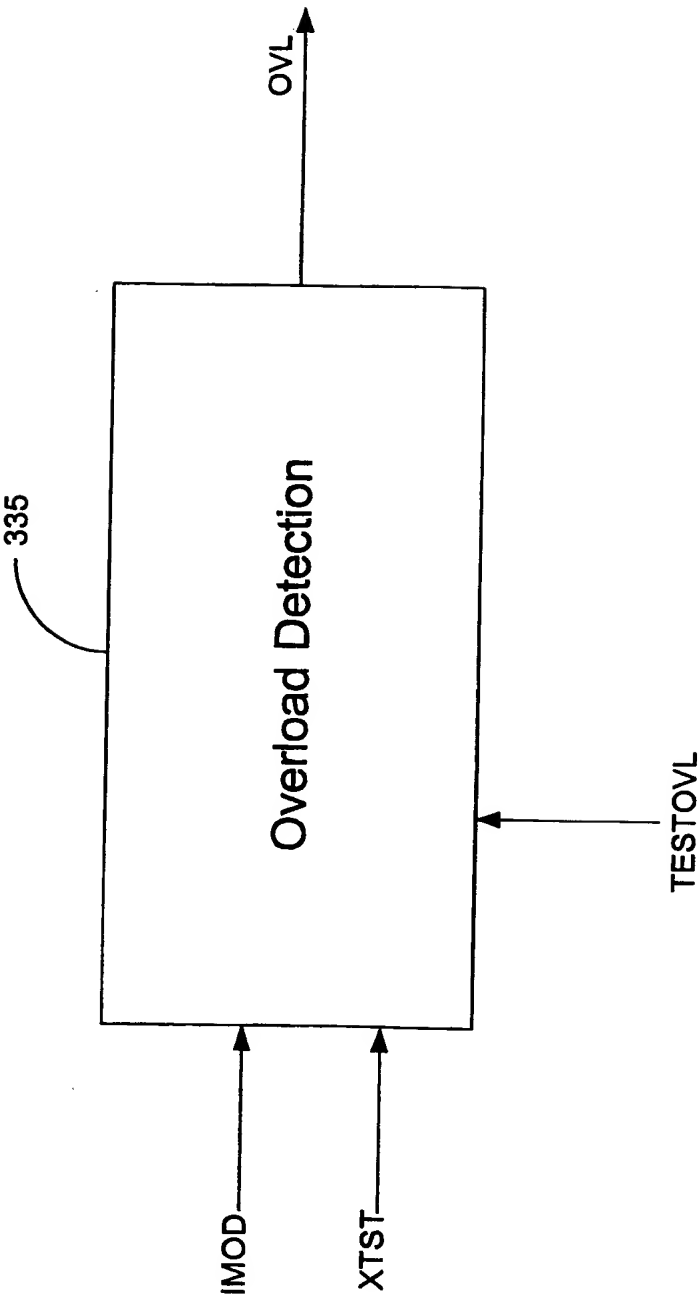


FIGURE 8

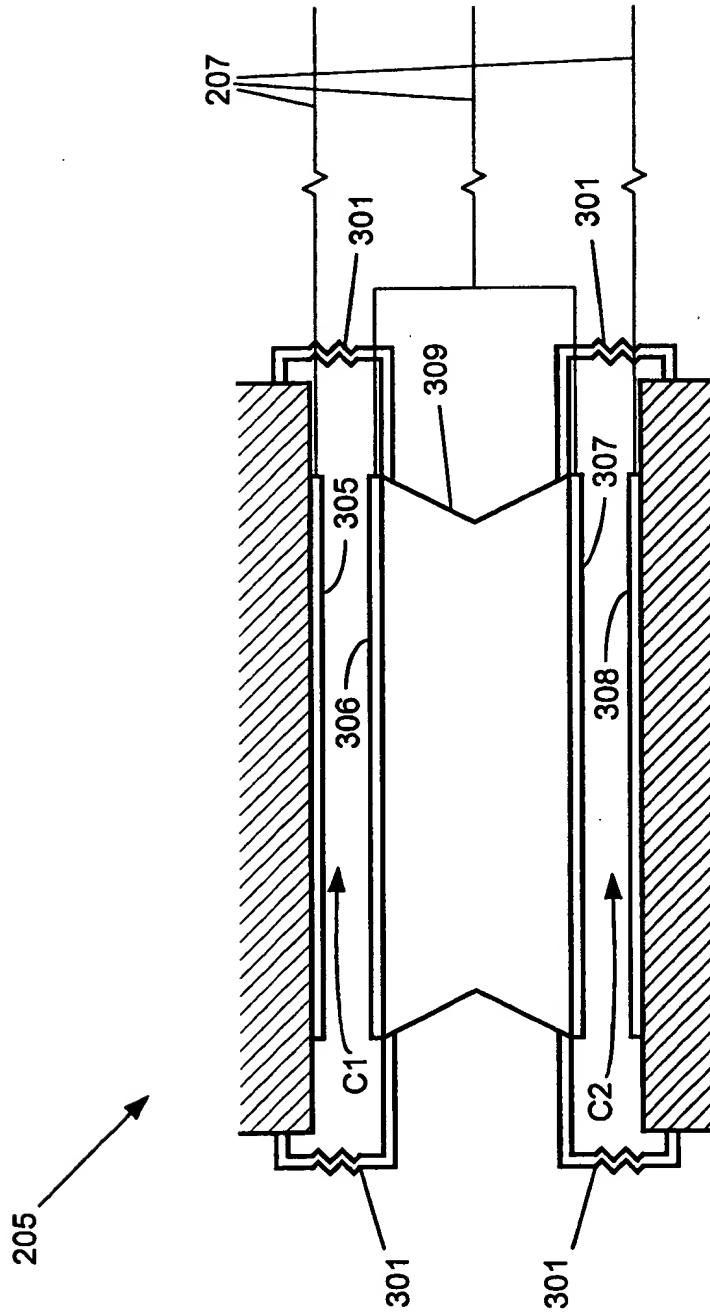


FIGURE 9

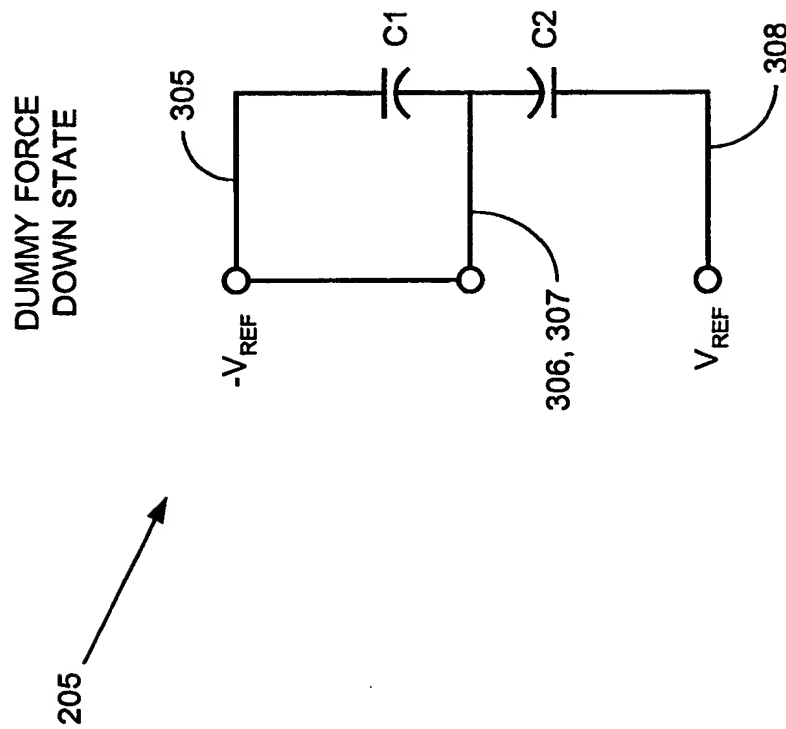


FIGURE 10

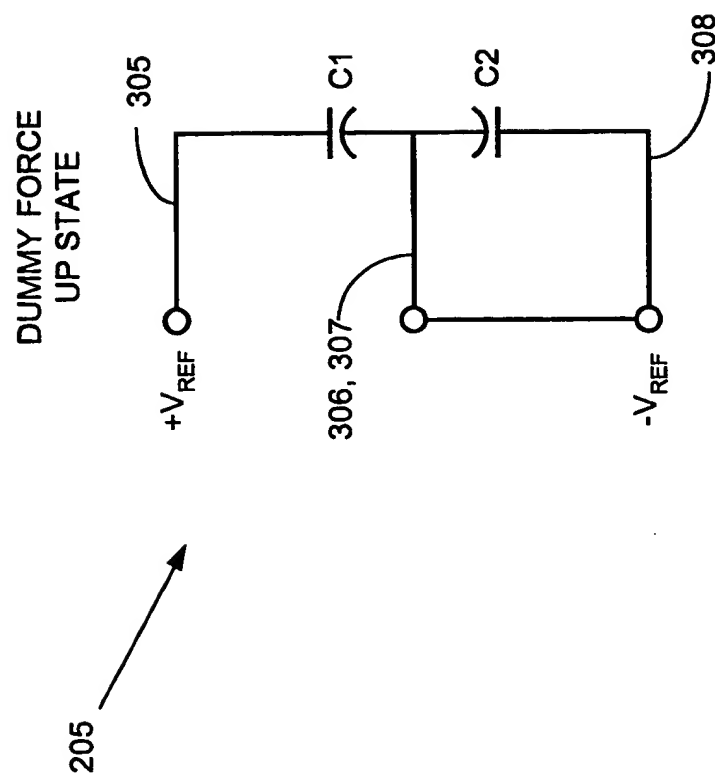


FIGURE 11

205



MODULATOR FORCING UP

FIRST MODULATOR
FORCE UP STATE

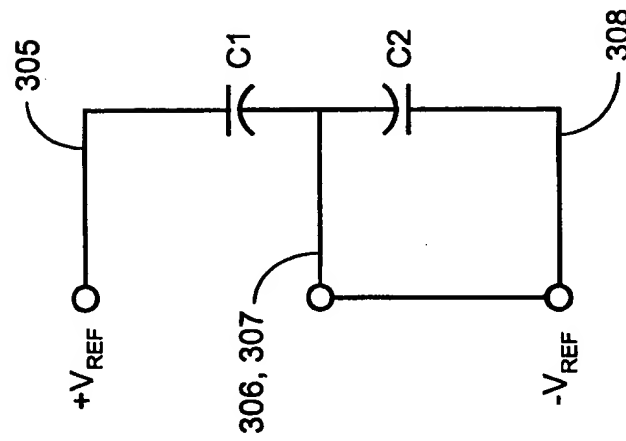


FIGURE 12a

SECOND MODULATOR
FORCE UP STATE

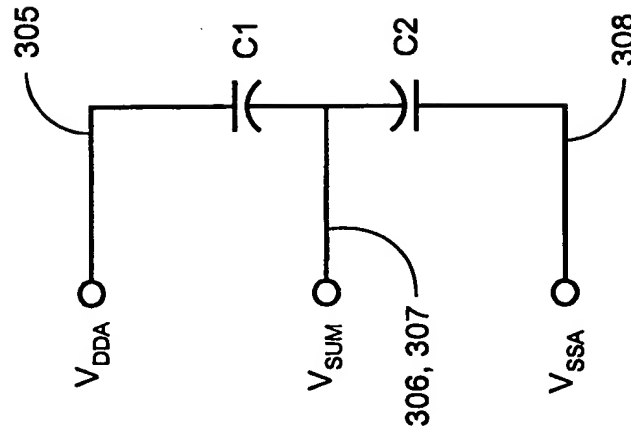


FIGURE 12b

205 ↗

MODULATOR FORCING DOWN

FIRST MODULATOR
FORCE DOWN STATE

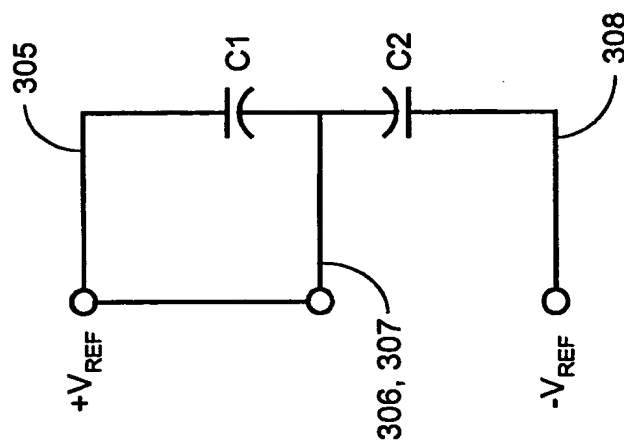


FIGURE 12c

SECOND MODULATOR
FORCE DOWN STATE

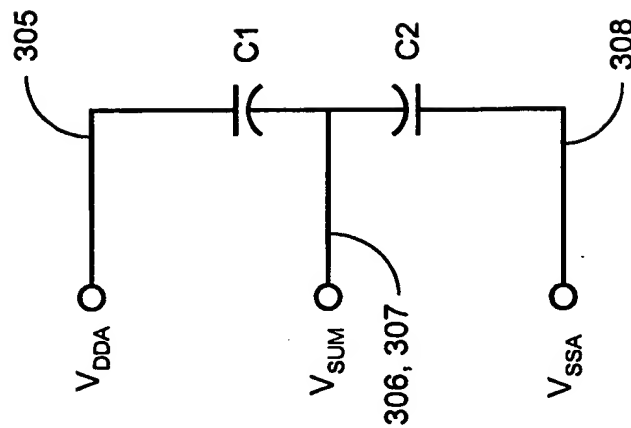


FIGURE 12d

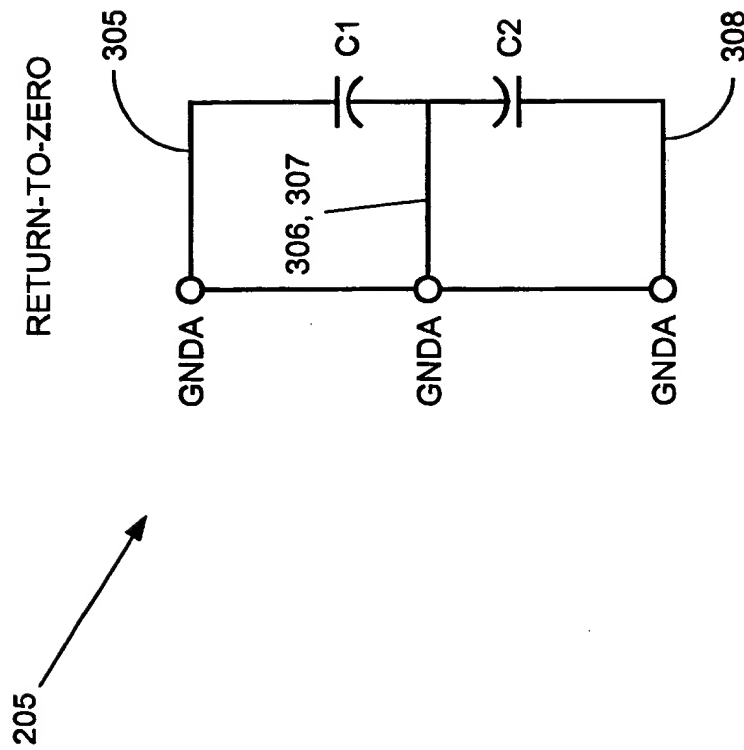


FIGURE 13

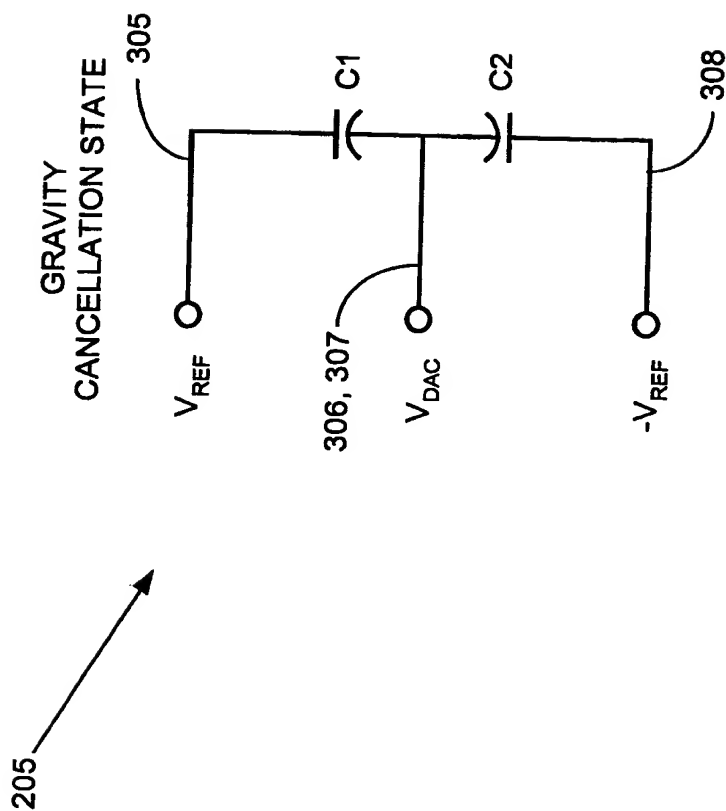


FIGURE 14

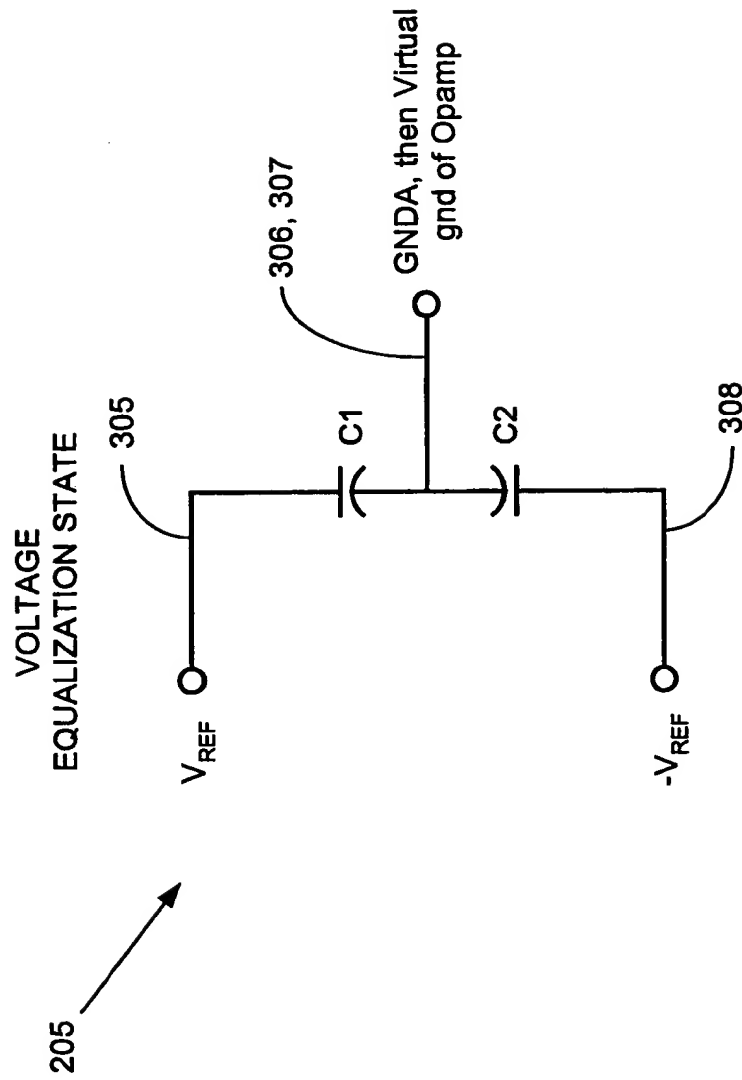


FIGURE 15

205

SENSING (CHARGE
SUMMATION) STATE 1

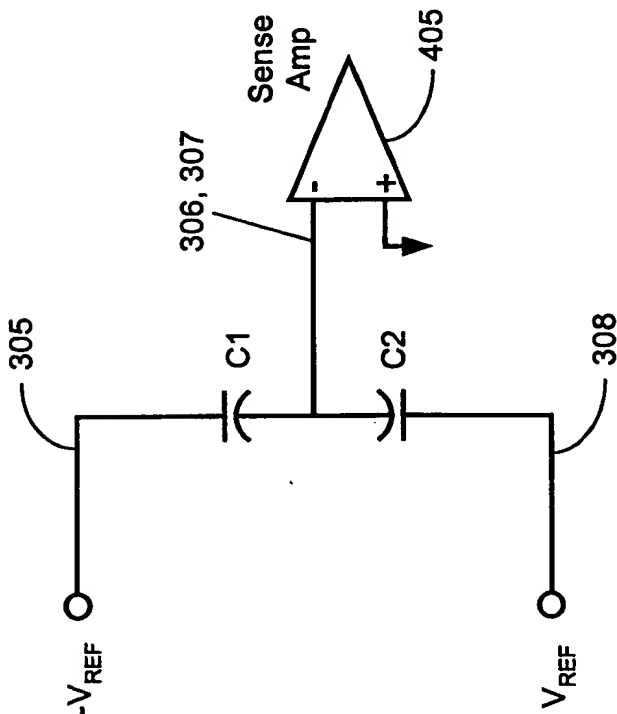


FIGURE 16a

SENSING (CHARGE
SUMMATION) STATE 2

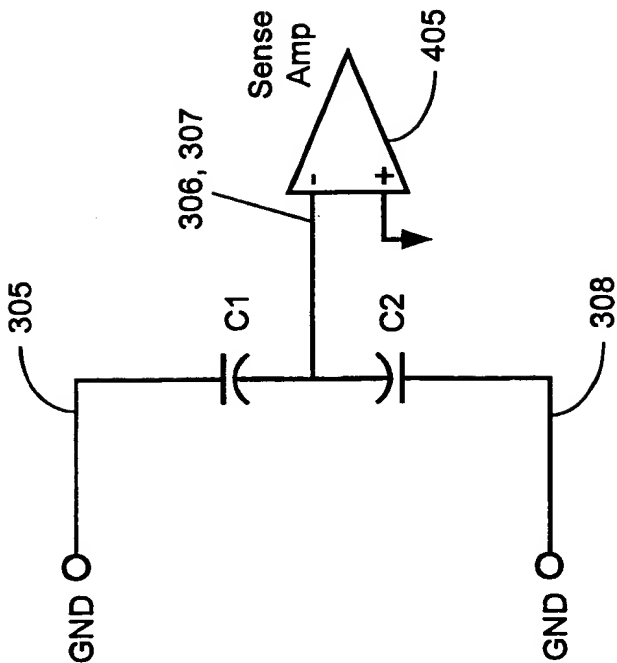


FIGURE 16b

	DUMMY FORCE UP STATE	DUMMY FORCE DOWN STATE	FIRST MODULATOR FORCE UP STATE	SECOND MODULATOR FORCE UP STATE	FIRST MODULATOR FORCE DOWN STATE	SECOND MODULATOR FORCE DOWN STATE	RETURN-TO- ZERO STATE	GRAVITY CANCELLATION STATE	VOLTAGE EQUALIZATION STATE	SENSING STATE 1	SENSING STATE 2
phsu1	off	off	off	on	off	on	off	off	off	off	off
phsu2	off	off	off	on	off	on	off	off	off	off	off
phsu1	on	off	on	off	off	off	off	on	on	off	off
phsu2	on	off	on	off	off	off	off	on	on	off	off
phd1	off	on	off	off	on	off	off	off	off	on	off
phd2	off	on	off	off	on	off	off	off	off	on	off
phg1	off	off	off	off	off	off	on	off	off	off	on
phg2	off	off	off	off	off	off	on	off	off	off	on
phtc	off	on	off	off	on	off	on	off	off	off	off
phbc	on	off	on	off	off	off	on	off	off	off	off
phsg	off	off	off	off	off	off	on	off	on, then off	off	off
phf	off	off	off	off	off	off	off	on	off	off	off
phloop	off	off	off	on	off	on	off	off	off	off	off
phsim	off	off	off	off	off	off	off	off	off	off	off
phxbuf	off	off	off	off	off	off	off	off	off	off	off
phs	off	off	off	off	off	off	off	off	off, then on	on	on
phz	on	on	on	on	on	on	on	on	on	off	off
pha	off	off	off	off	off	off	off	off	off	on	on

FIGURE 17

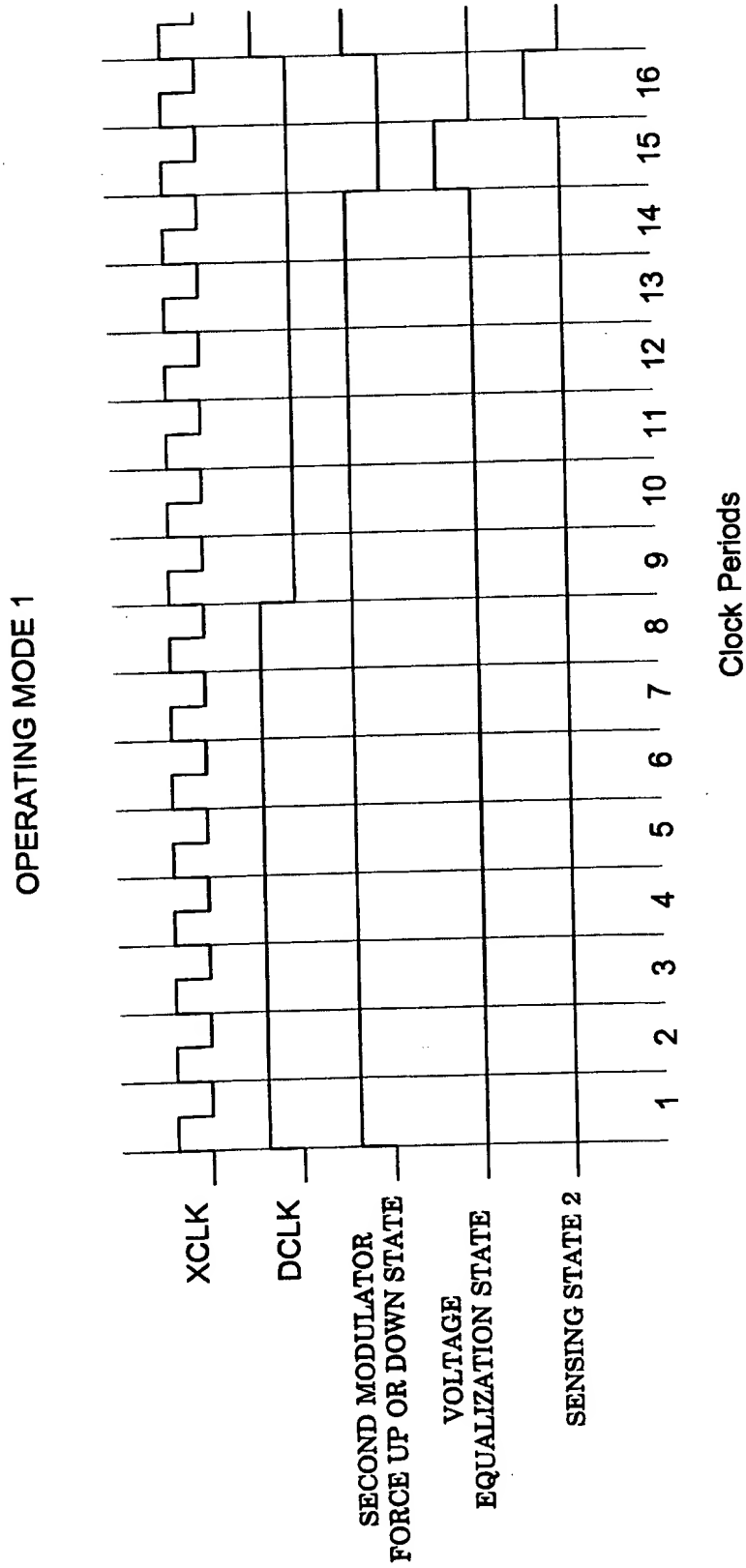


FIGURE 18

SECOND MODULATOR
FORCE UP OR
DOWN STATE

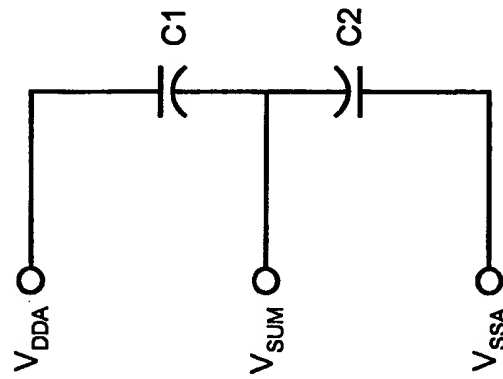


FIGURE 19a

VOLTAGE
EQUALIZATION
STATE

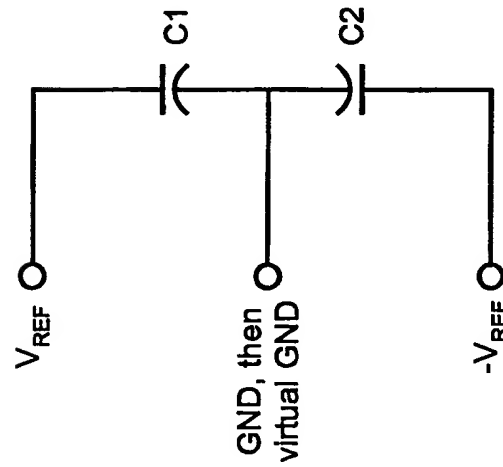


FIGURE 19b

SENSING STATE 2

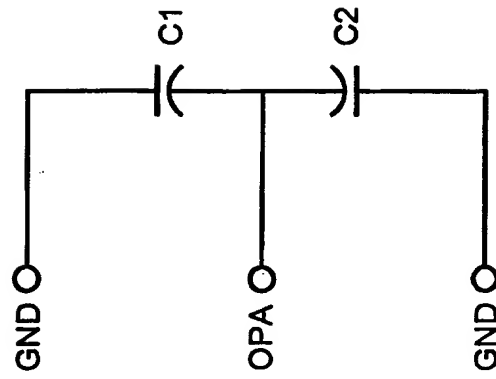


FIGURE 19c

OPERATING MODE 2

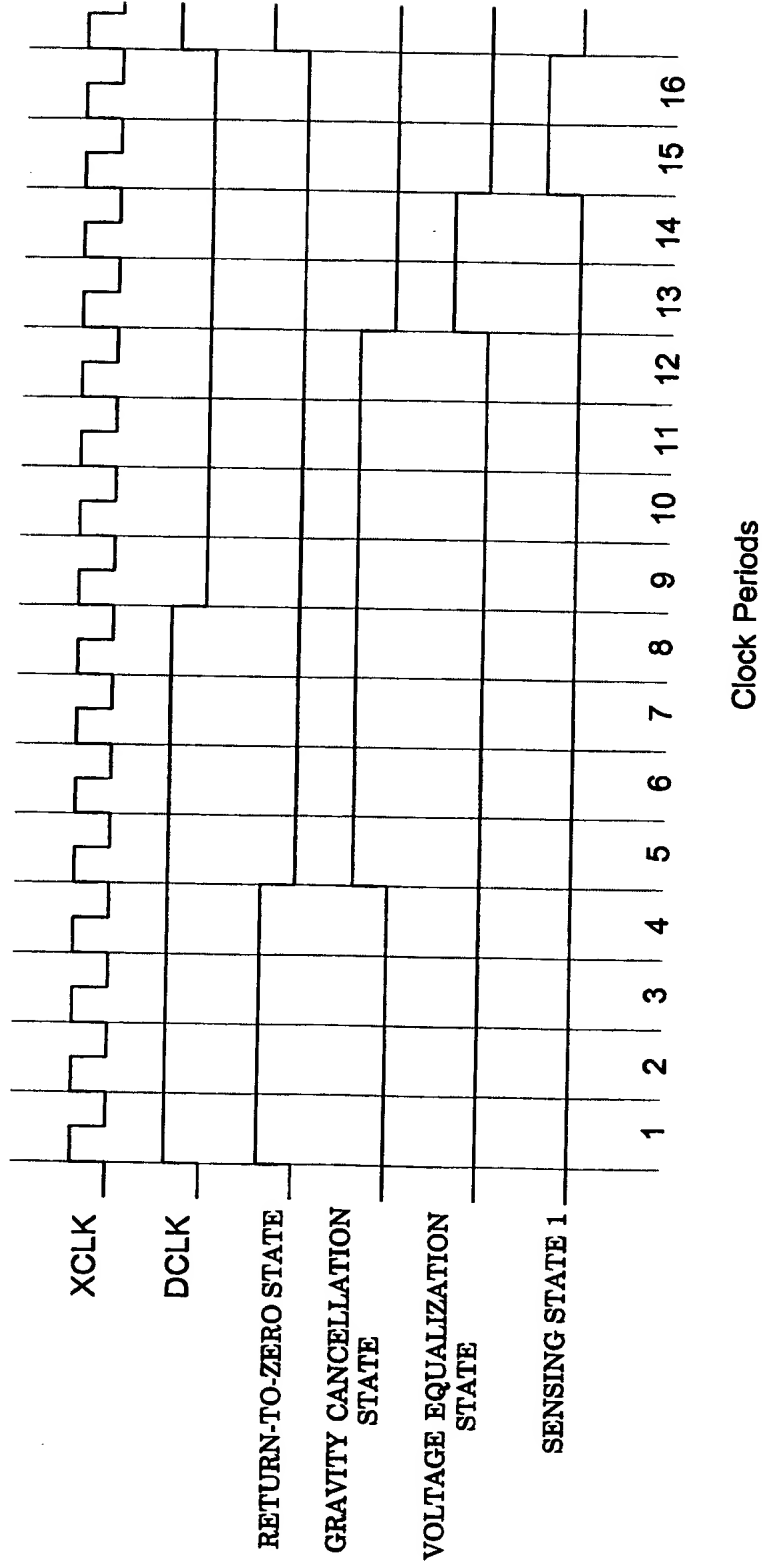
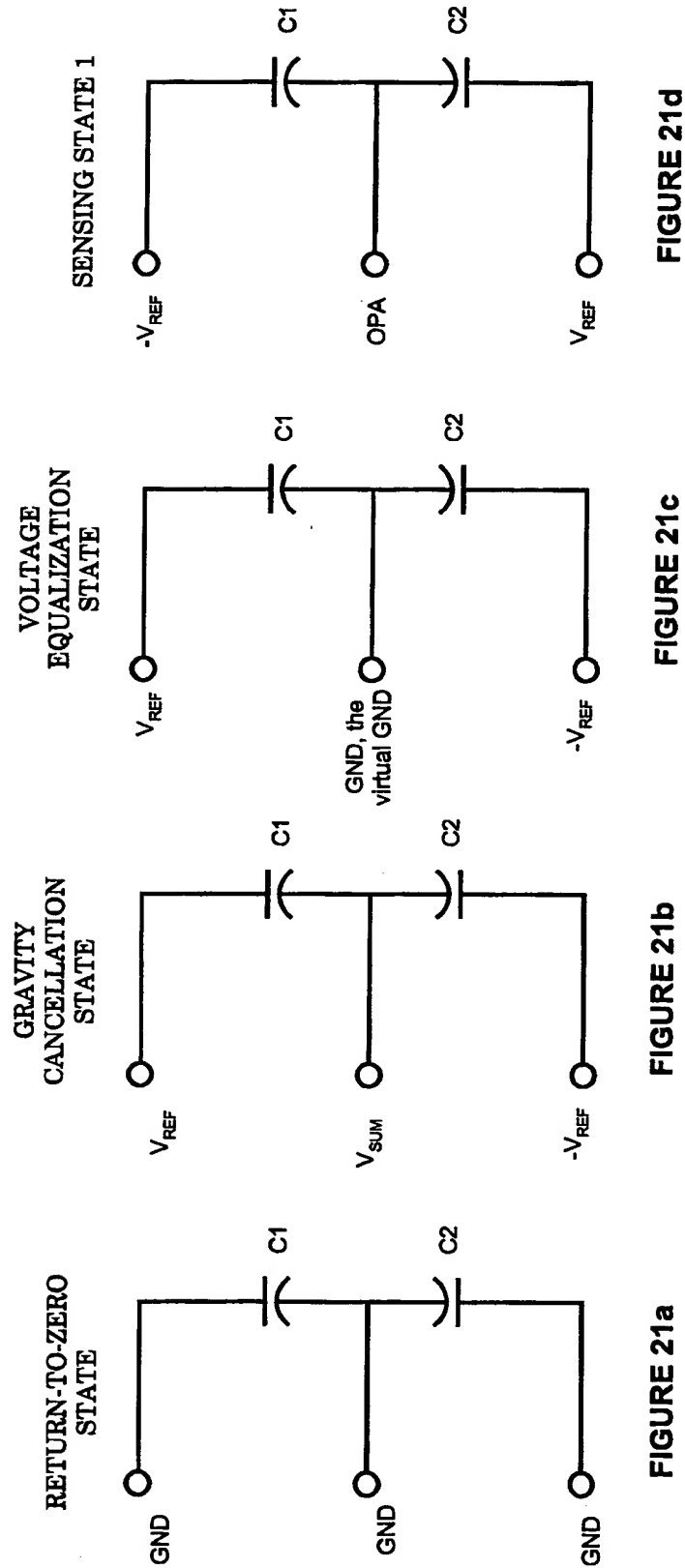


FIGURE 20



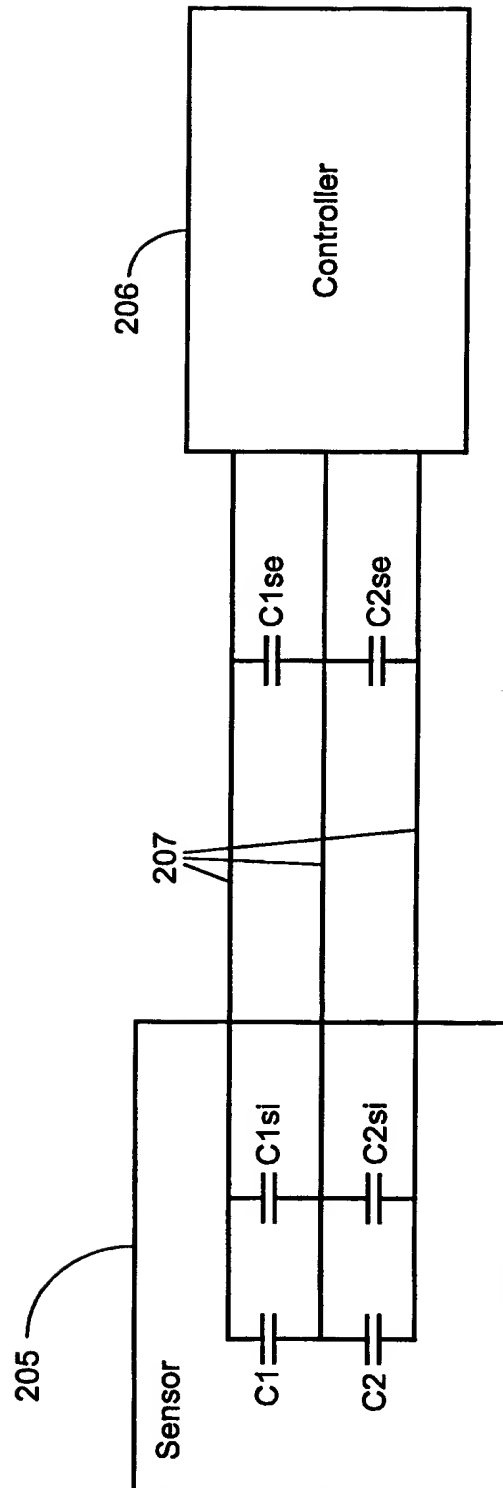


FIGURE 22

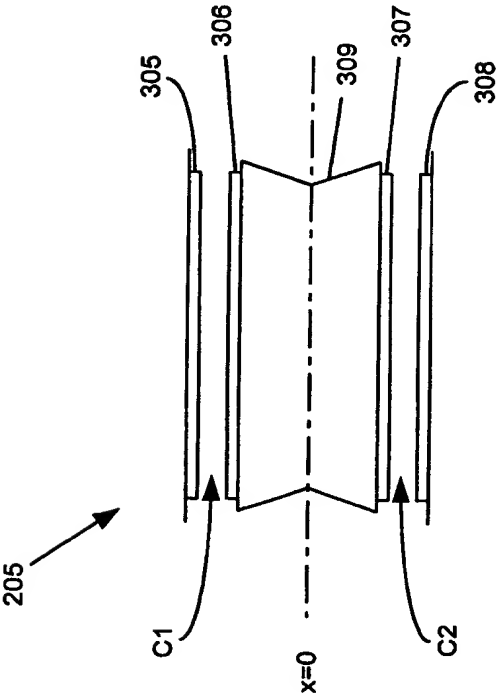


FIGURE 23a

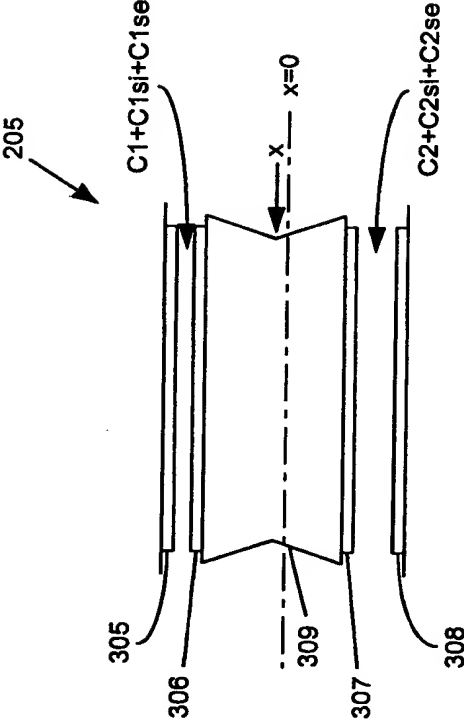


FIGURE 23b

OPERATING MODE 3

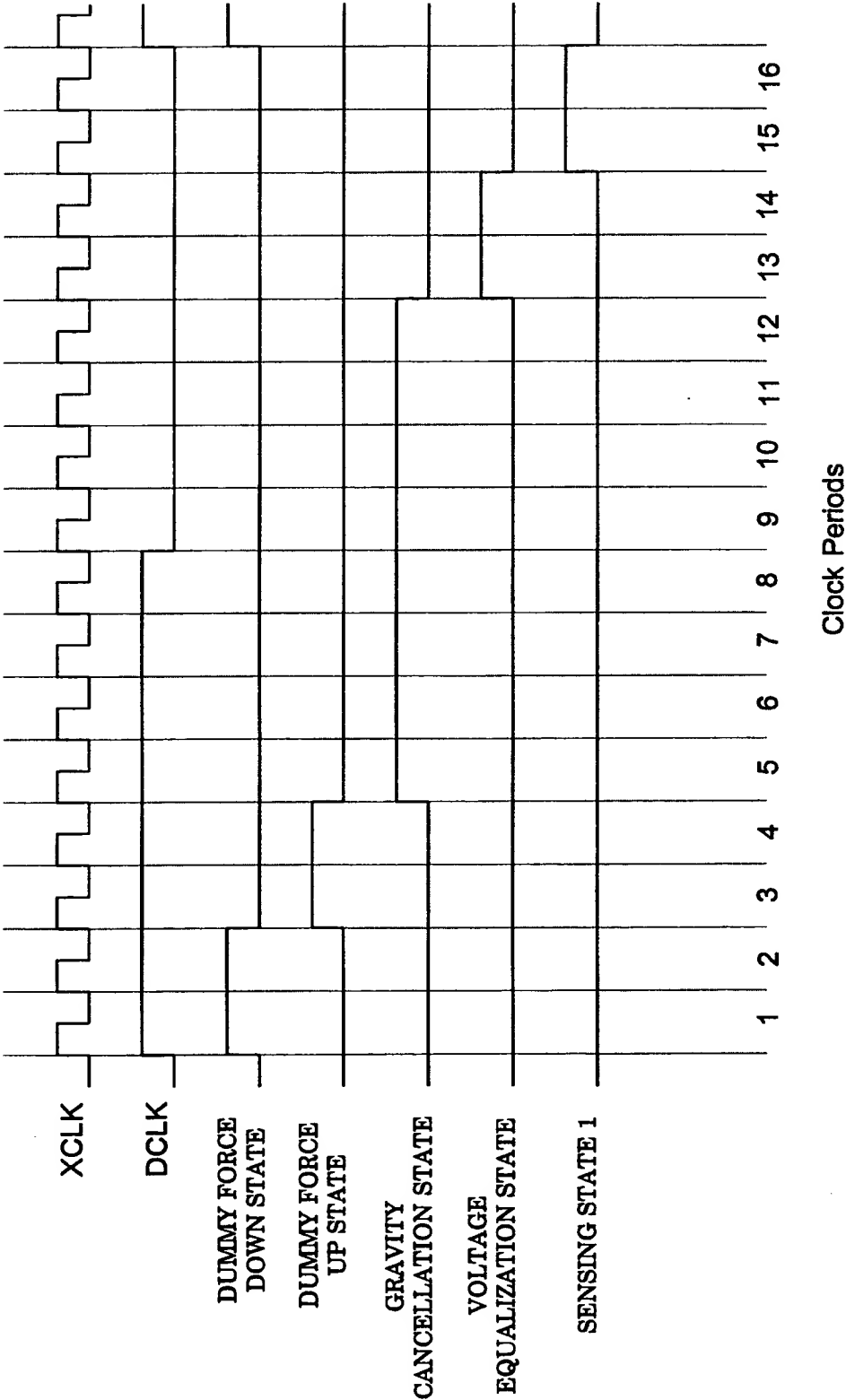


FIGURE 24

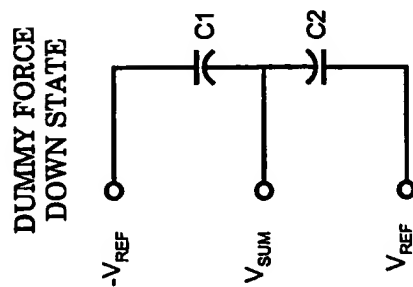


FIGURE 25a

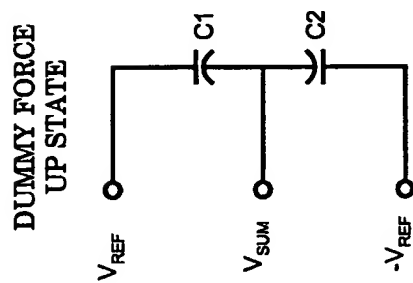


FIGURE 25b

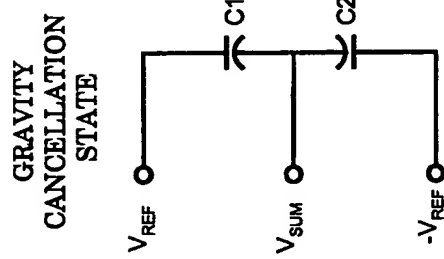


FIGURE 25c

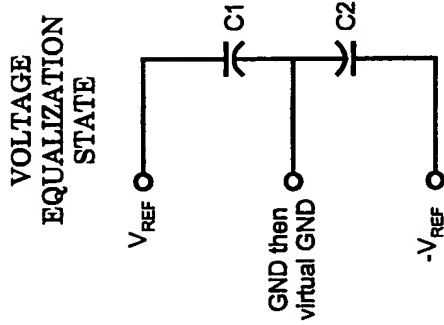


FIGURE 25d

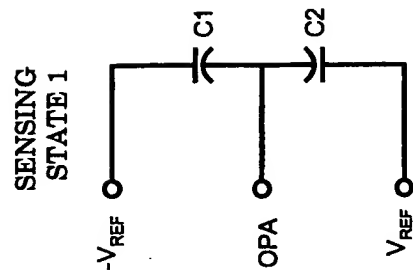


FIGURE 25e

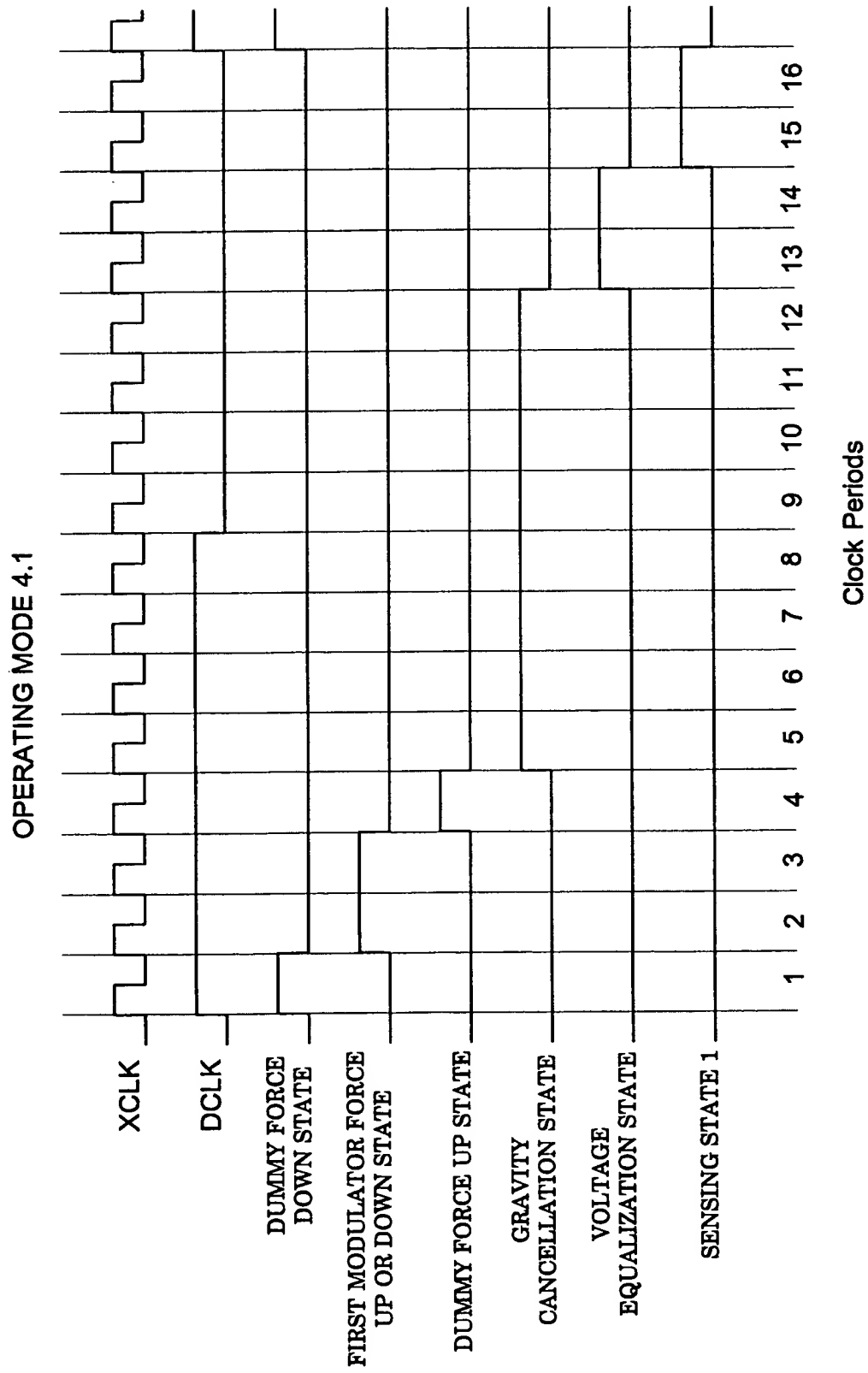


FIGURE 26

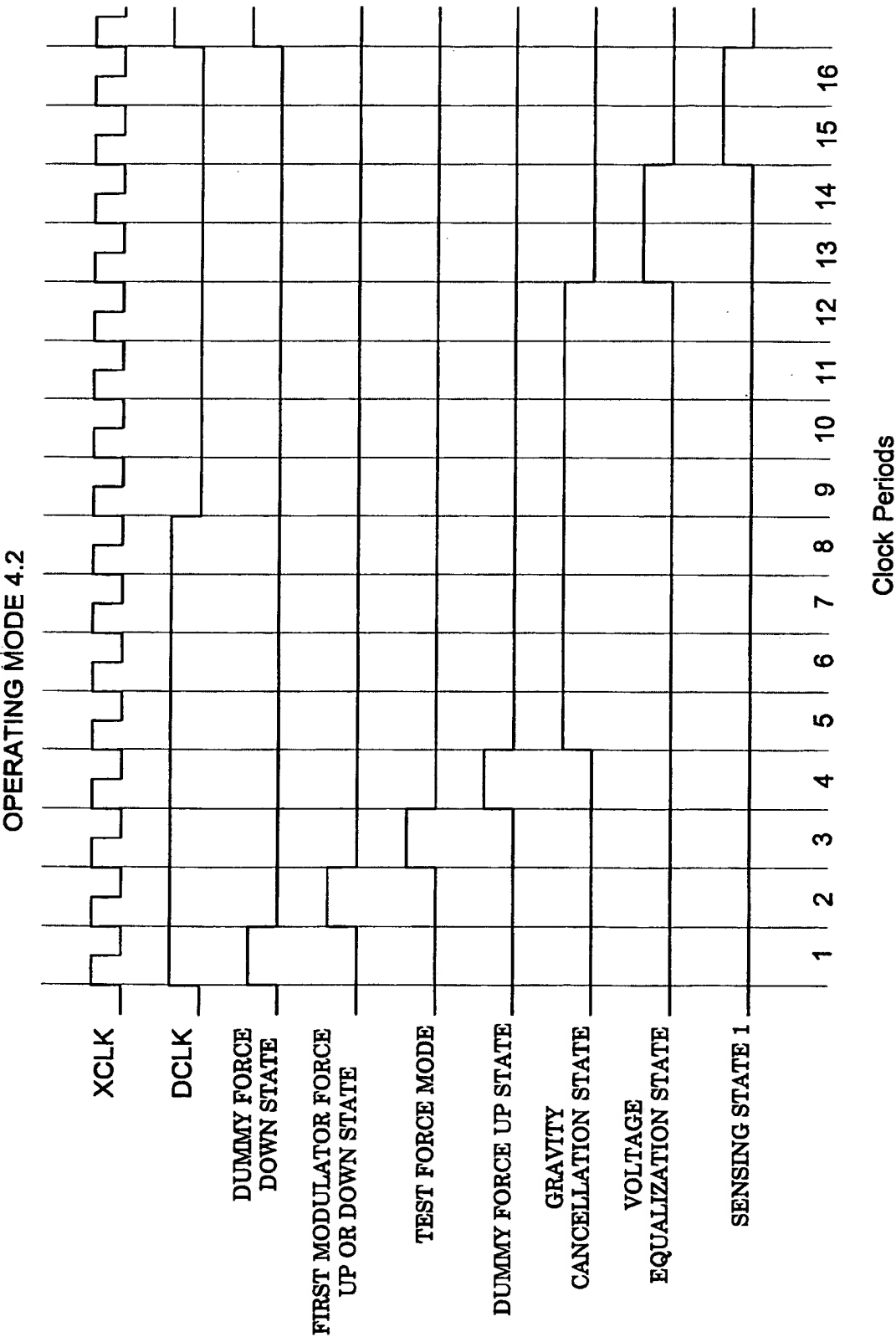


FIGURE 27

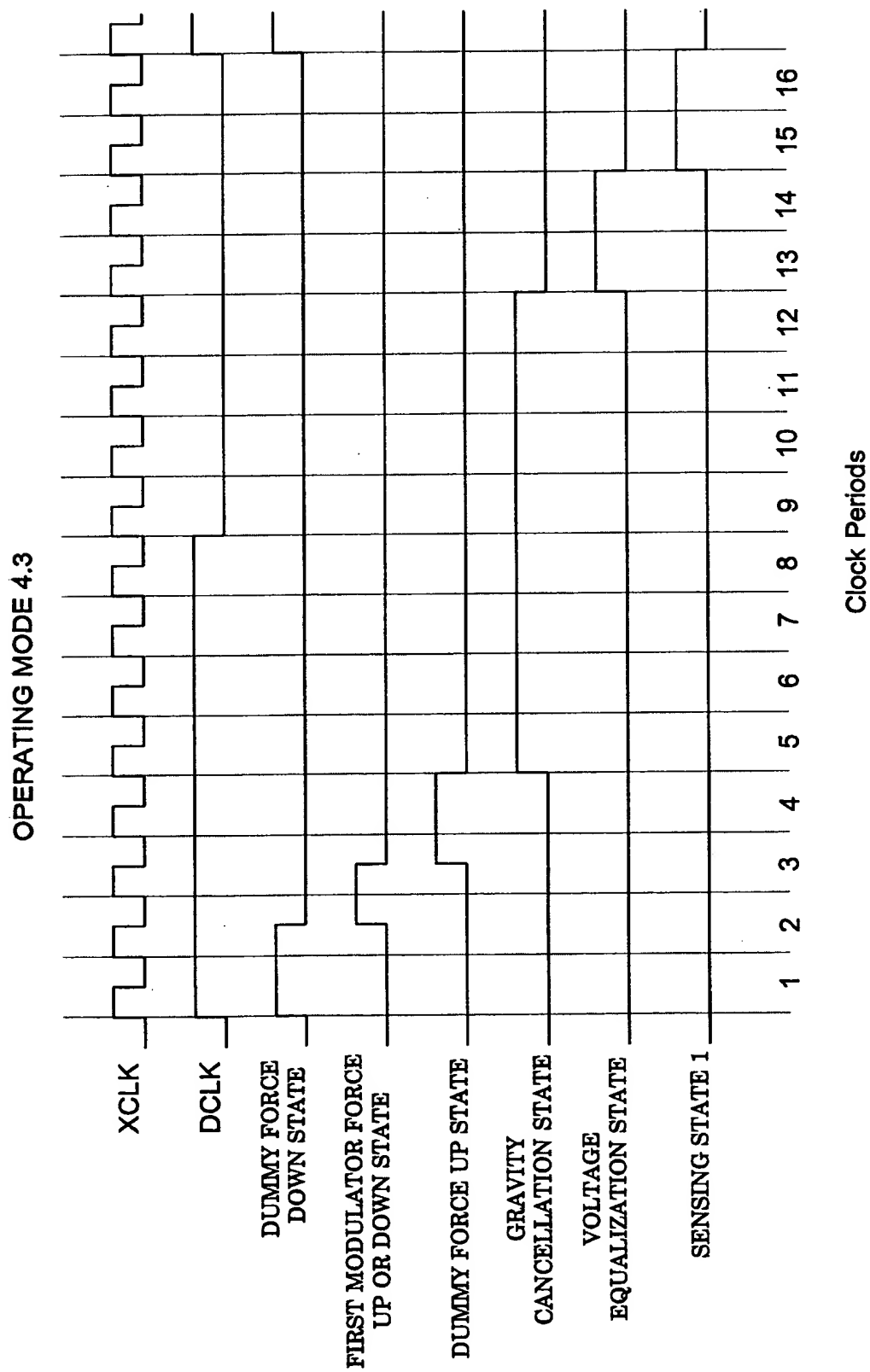


FIGURE 28

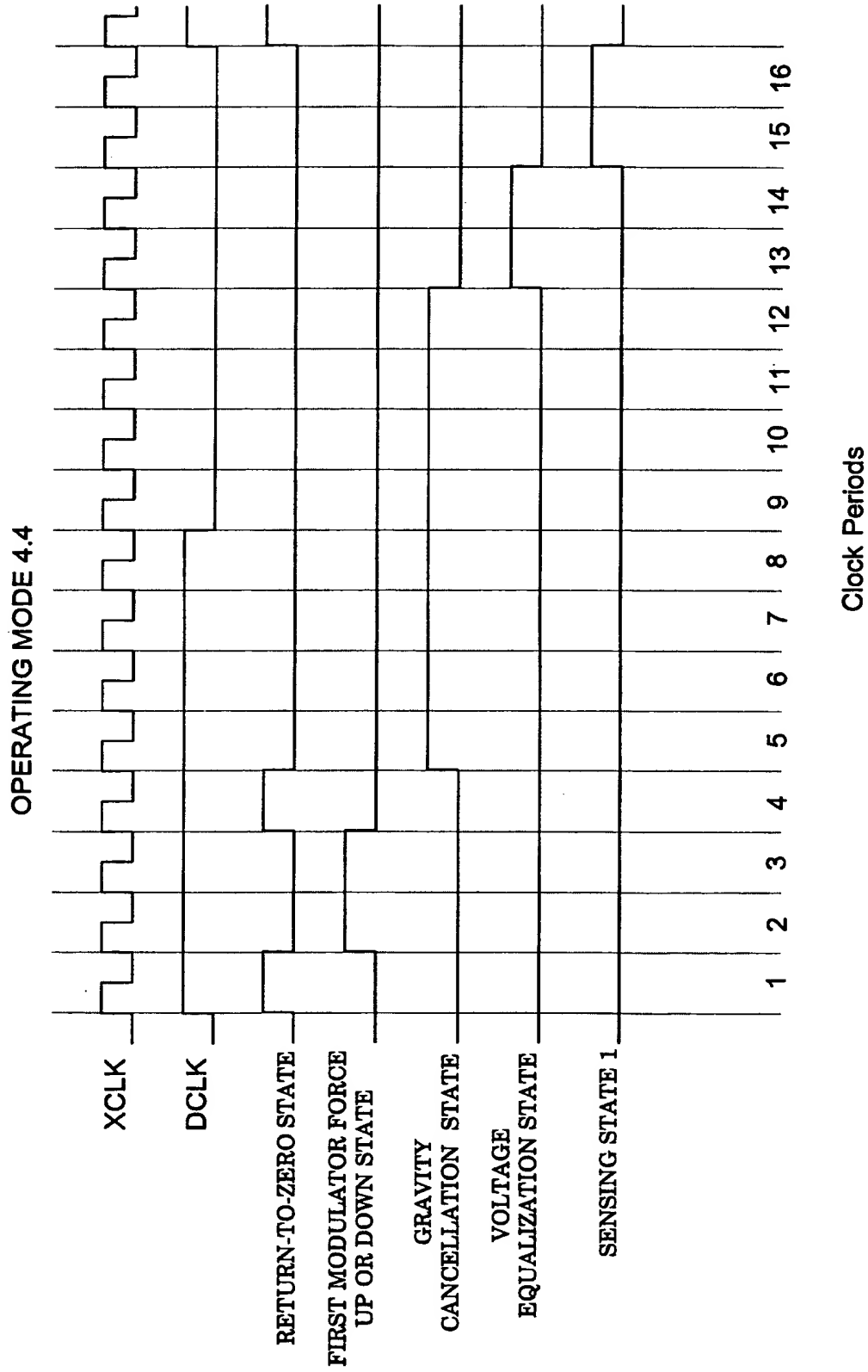


FIGURE 29

MODE 4.5

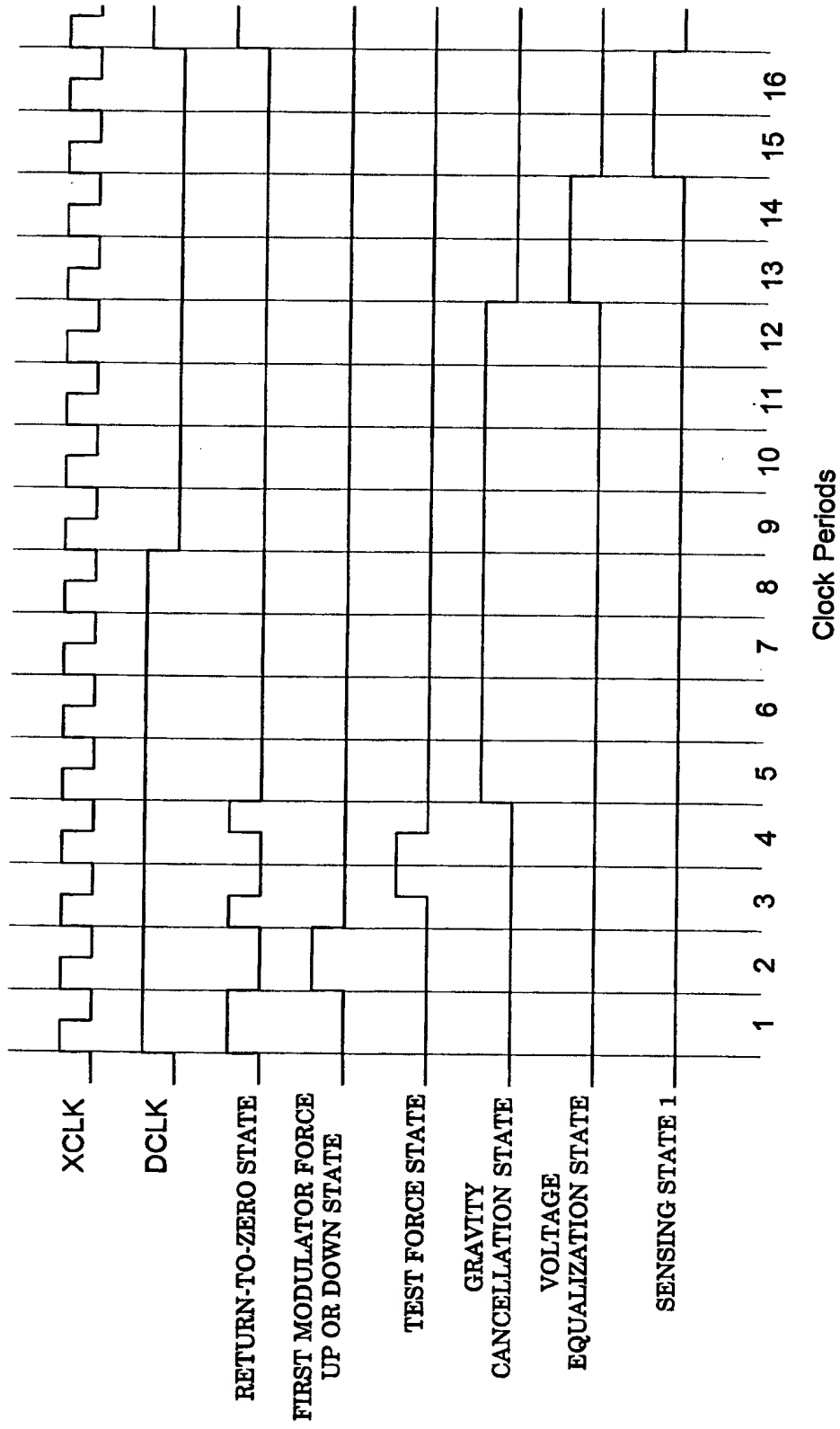


FIGURE 30

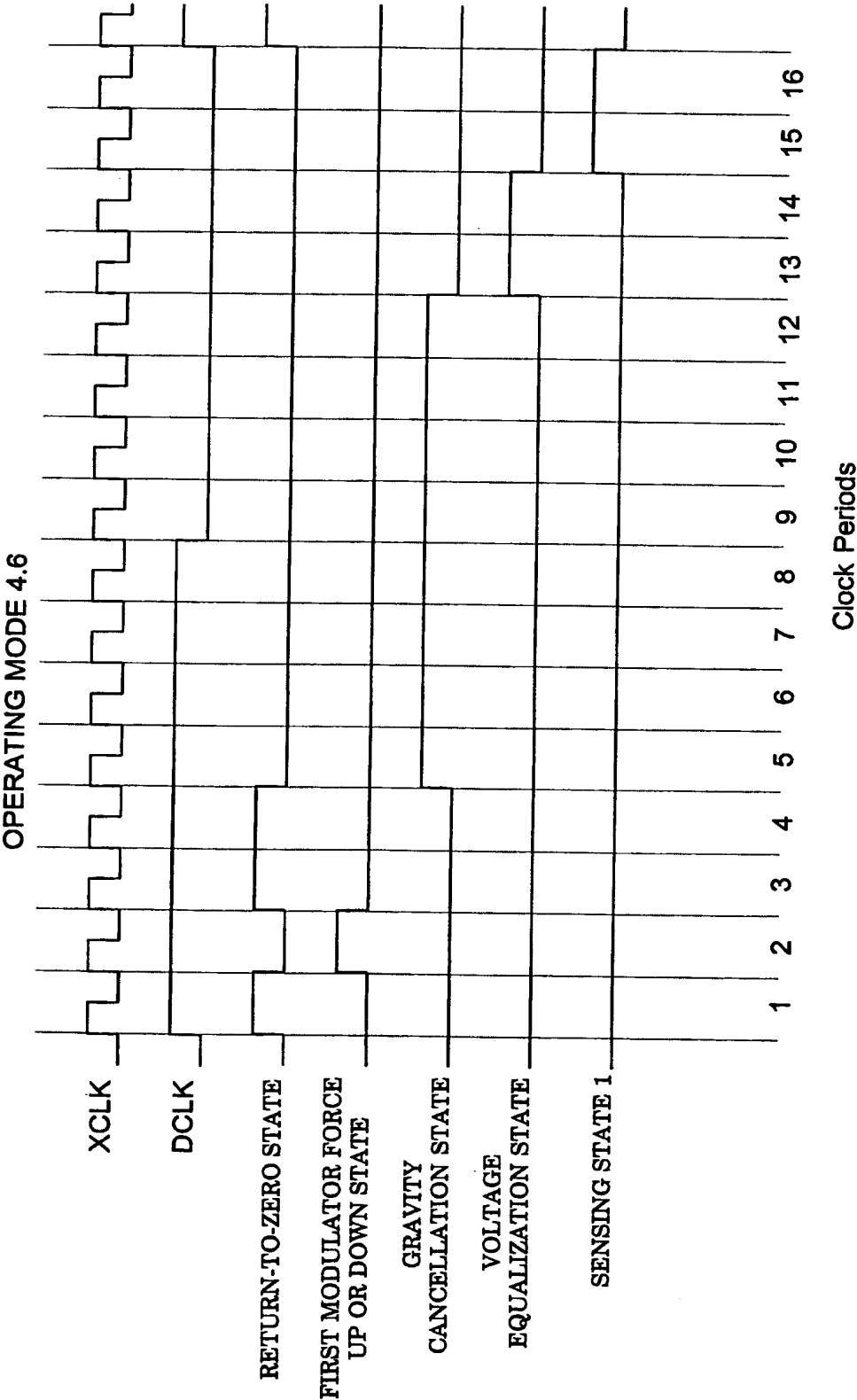


FIGURE 31

OPERATING MODE 4.7

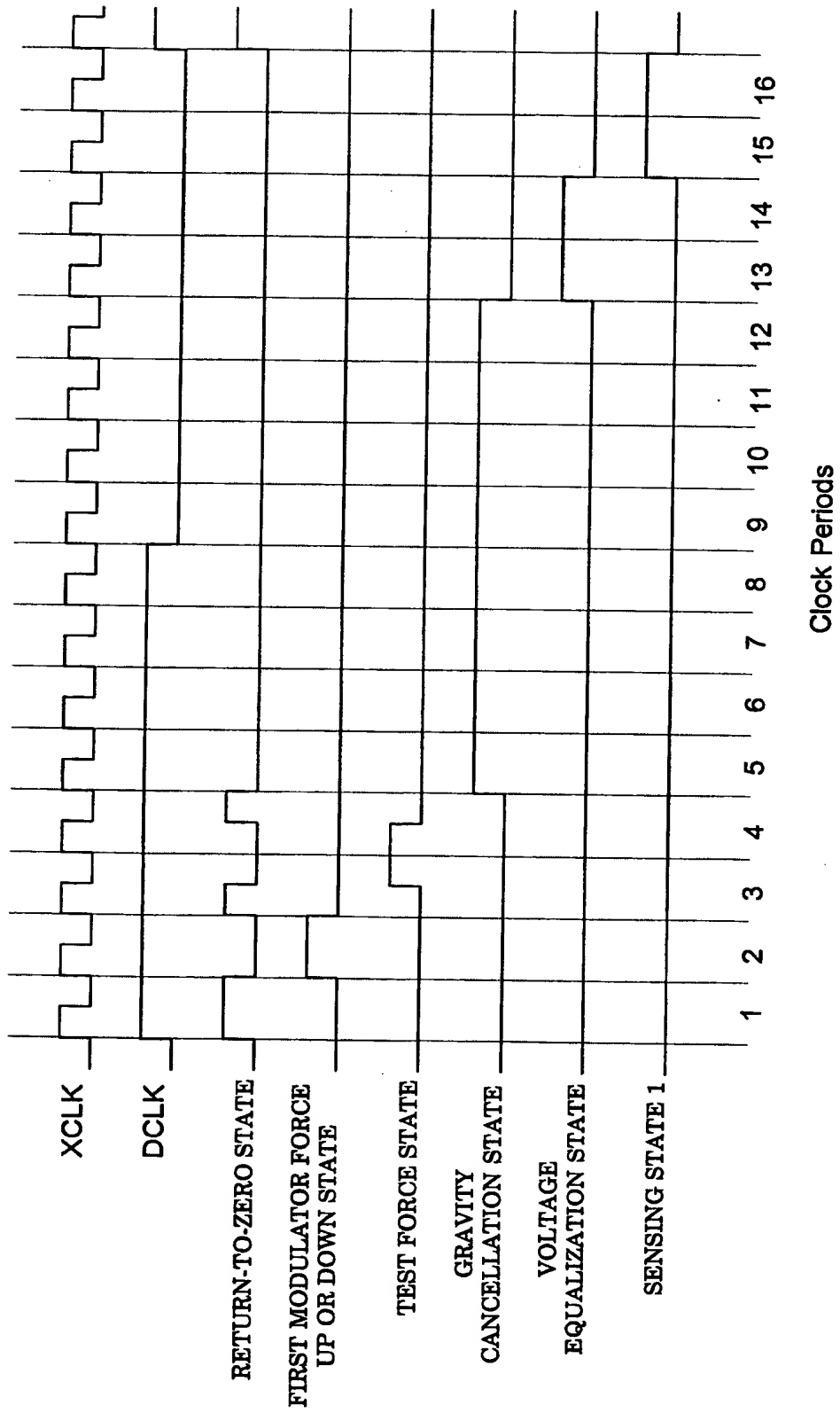


FIGURE 32

OPERATING MODE 4.8

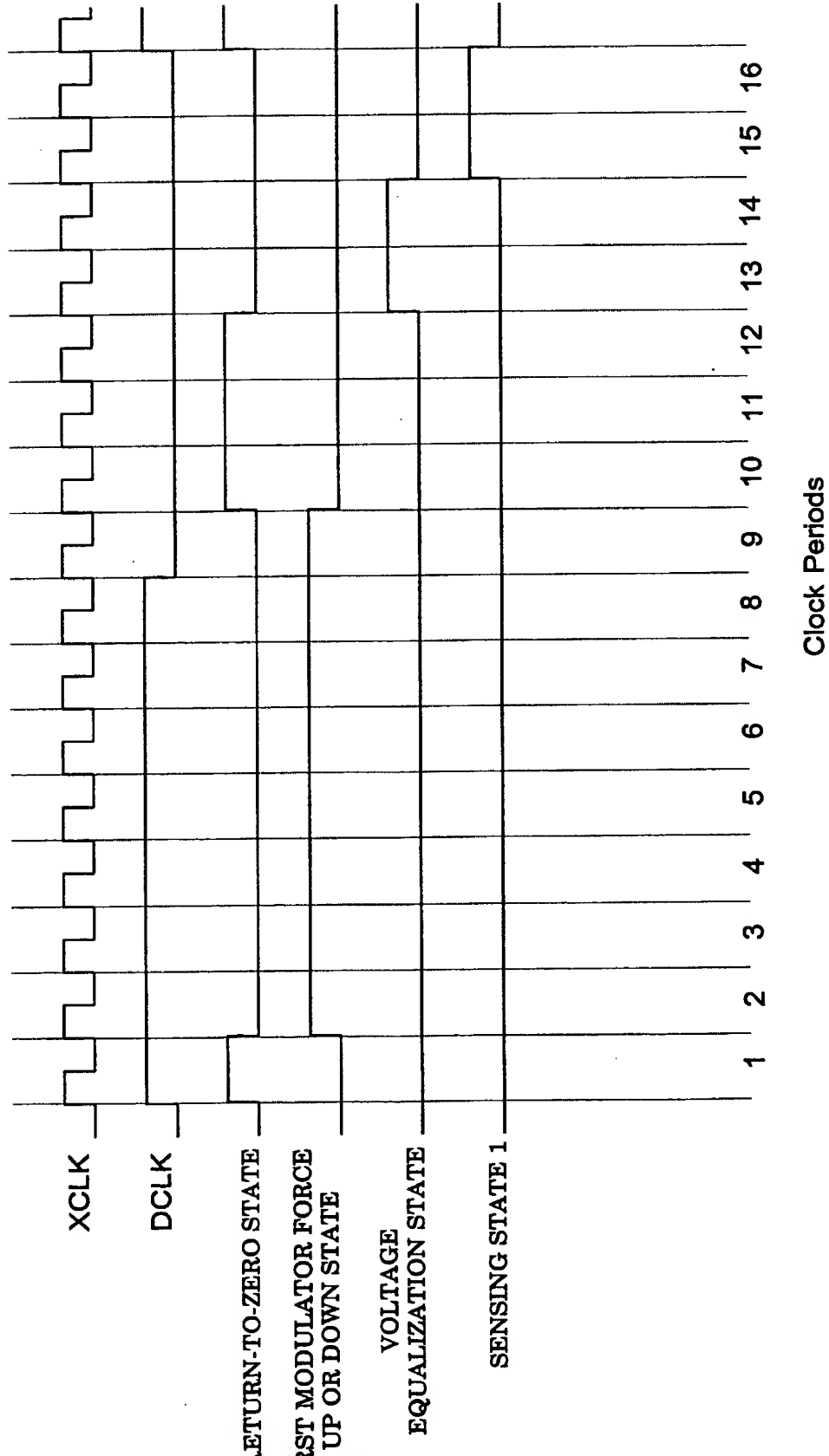


FIGURE 33

Start-Up w/o stray
capacitances

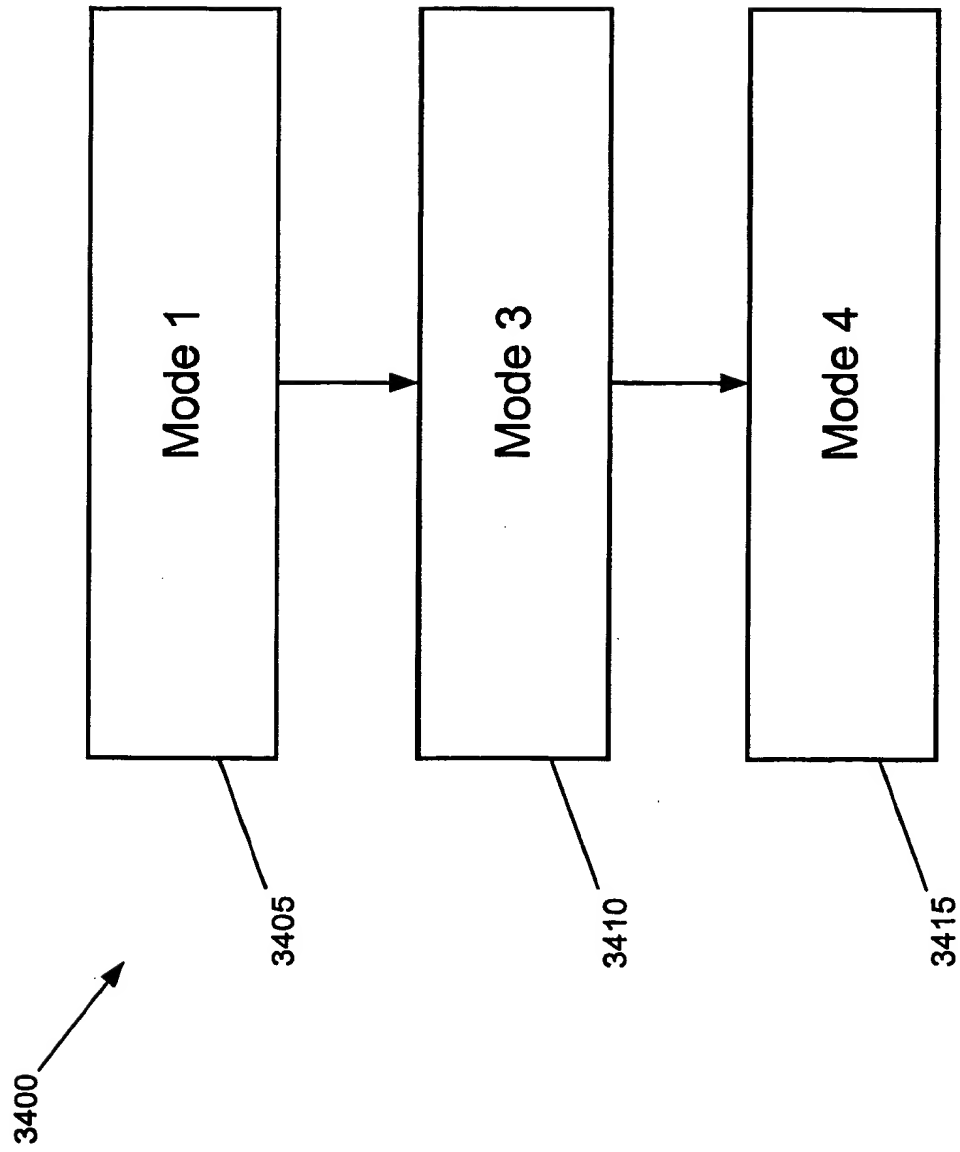


FIGURE 34

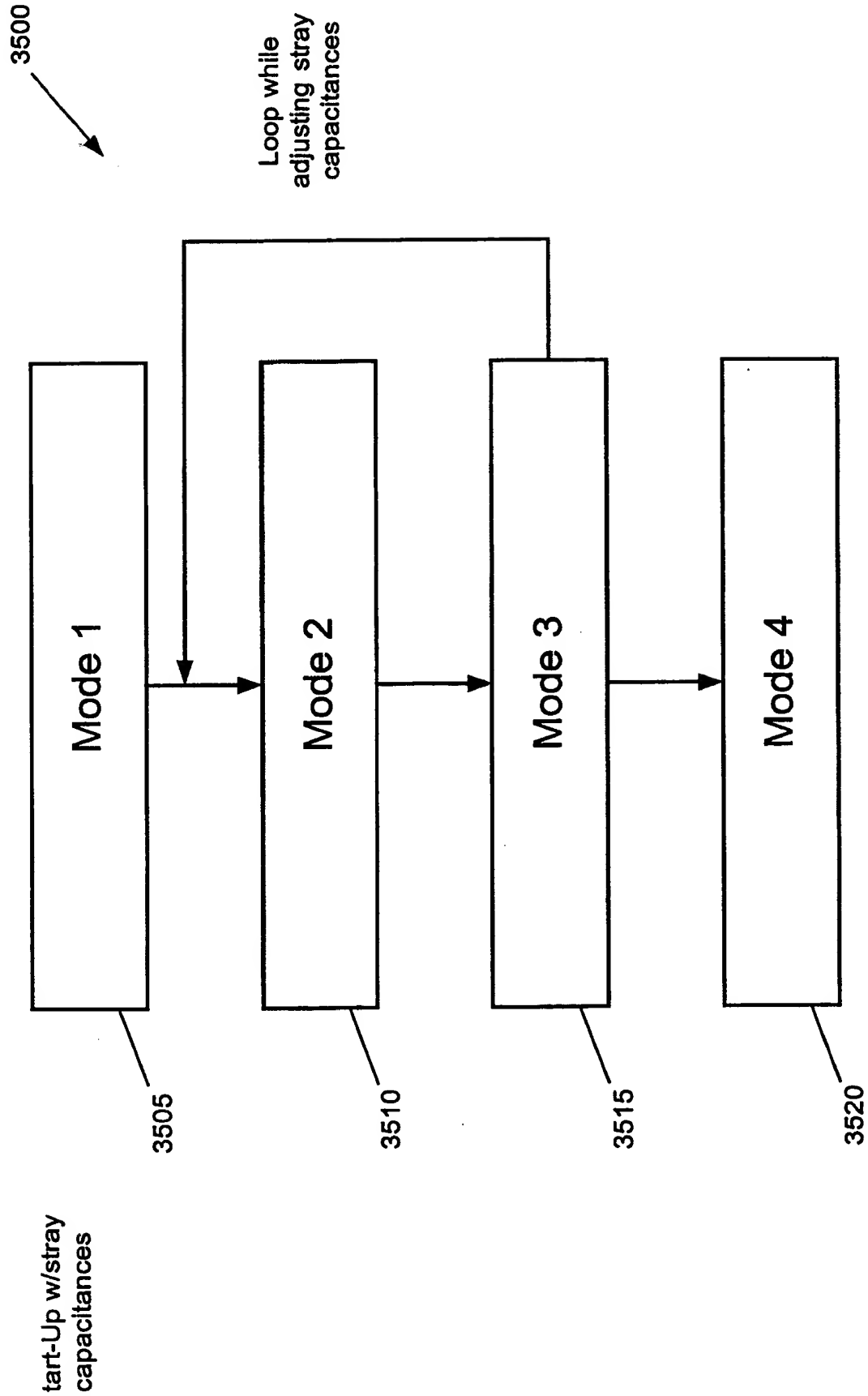


FIGURE 35

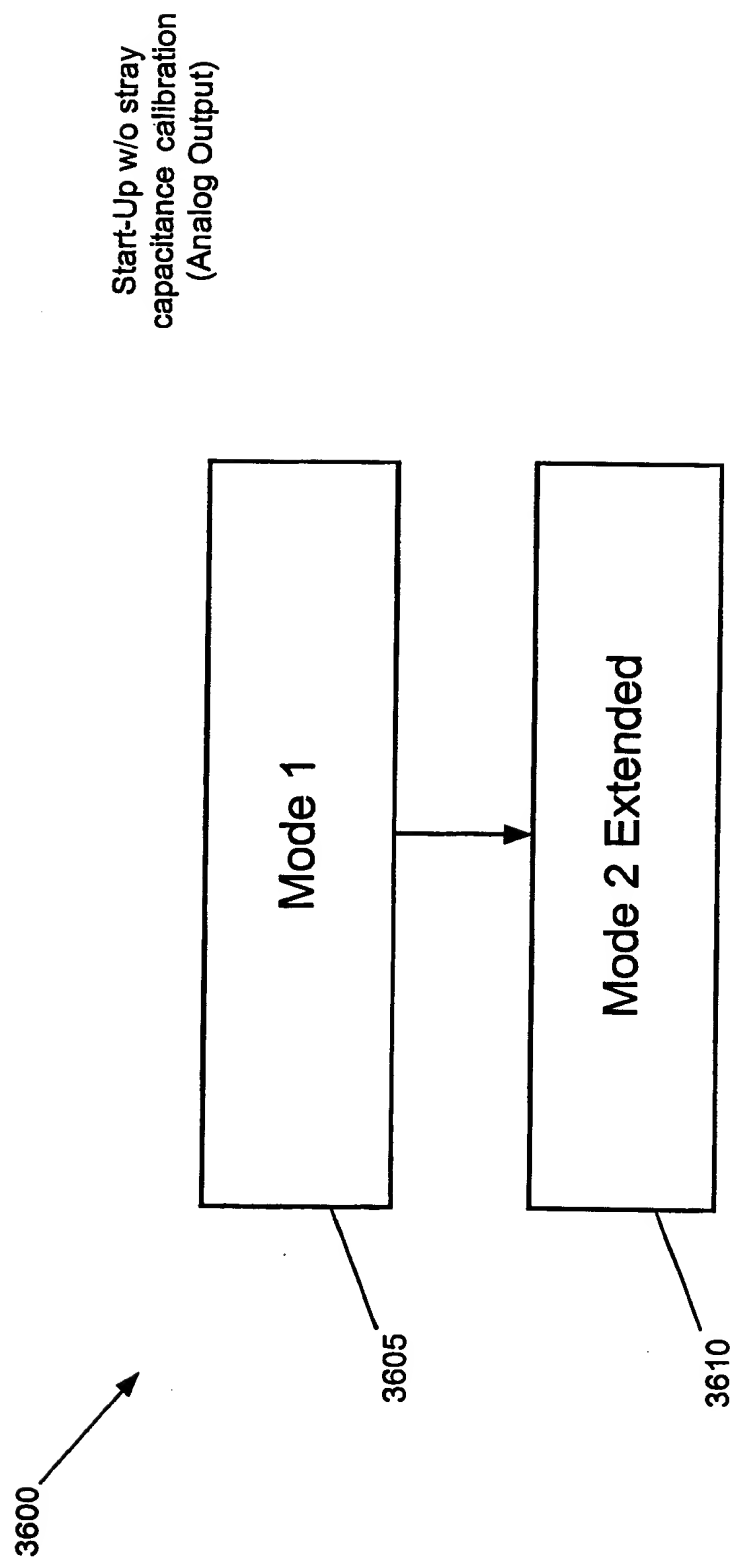


FIGURE 36

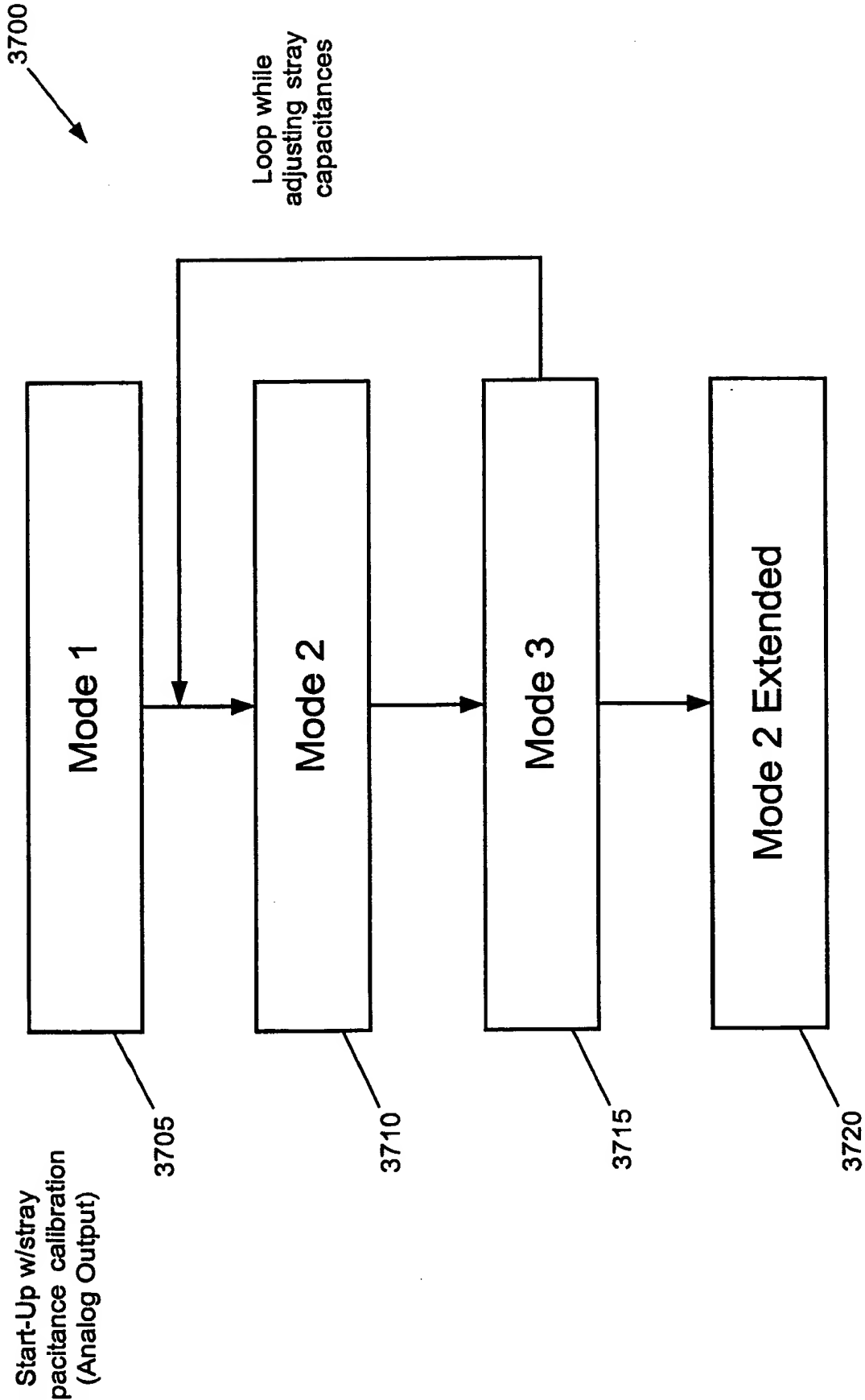


FIGURE 37

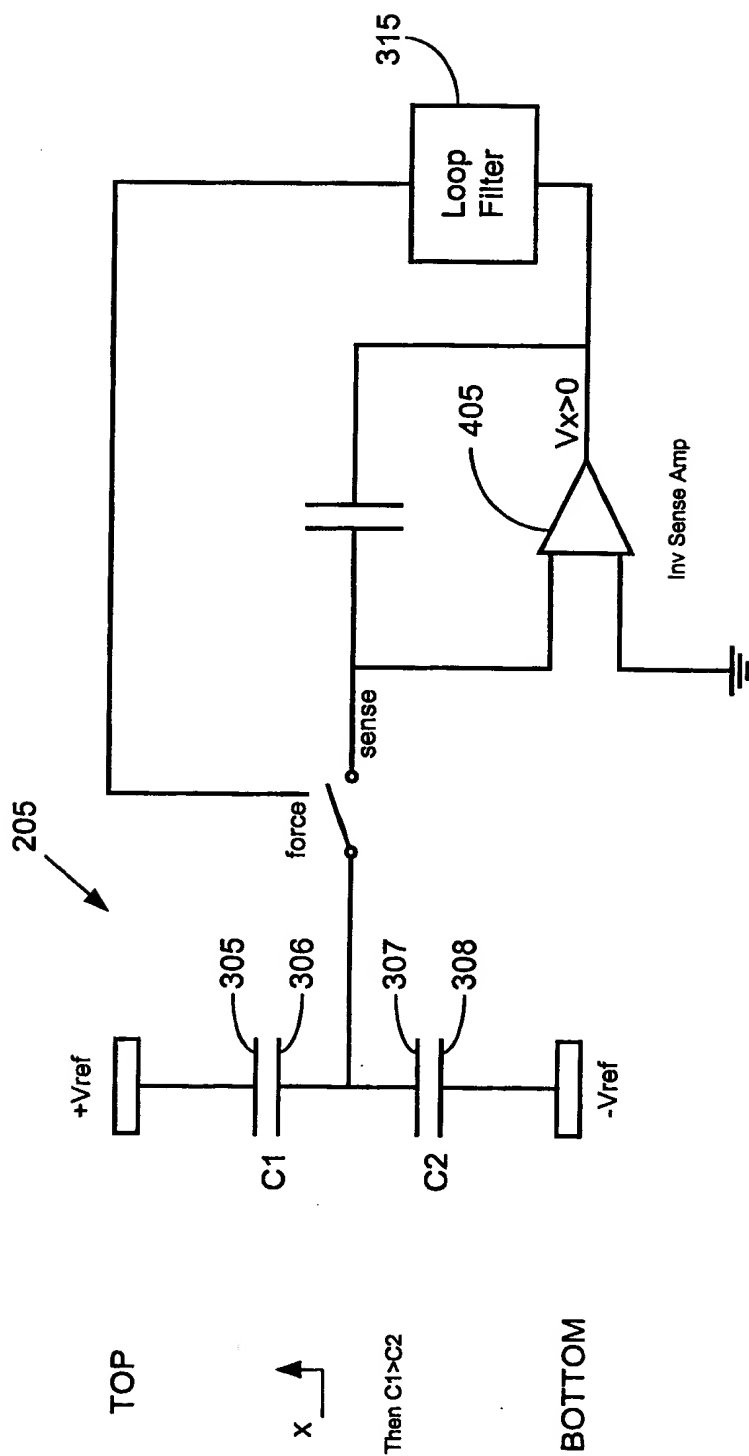


FIGURE 38

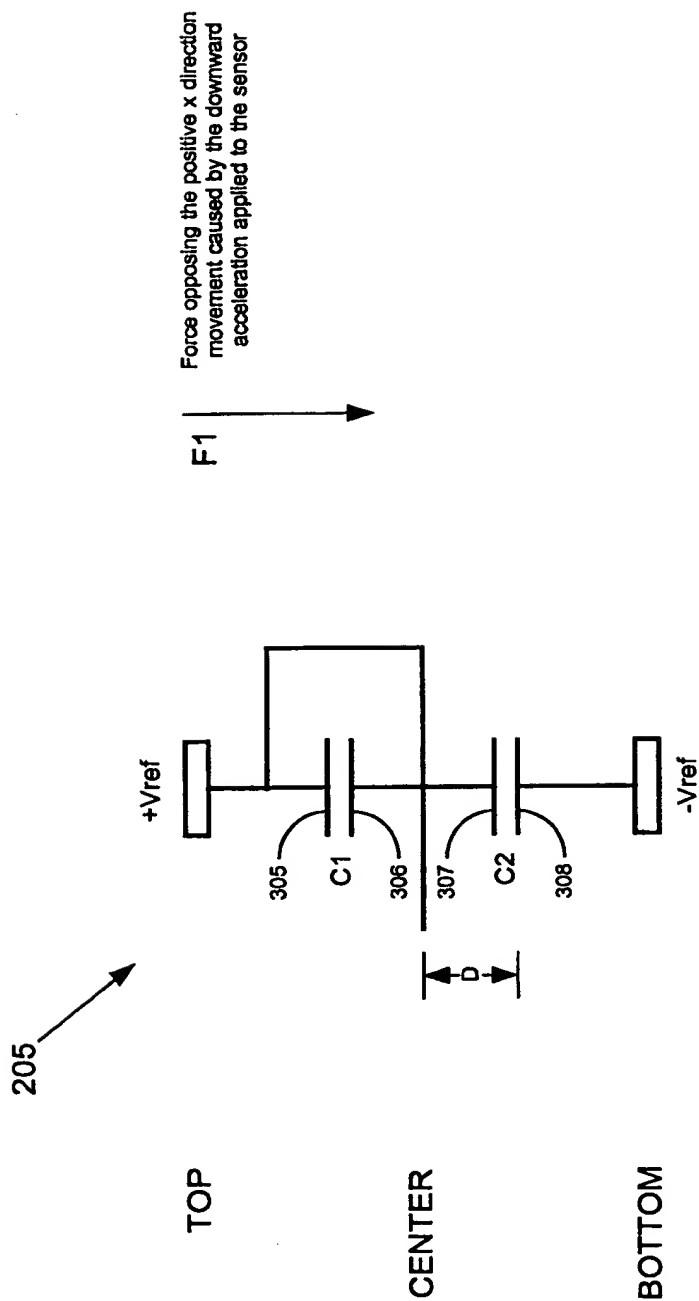


FIGURE 39

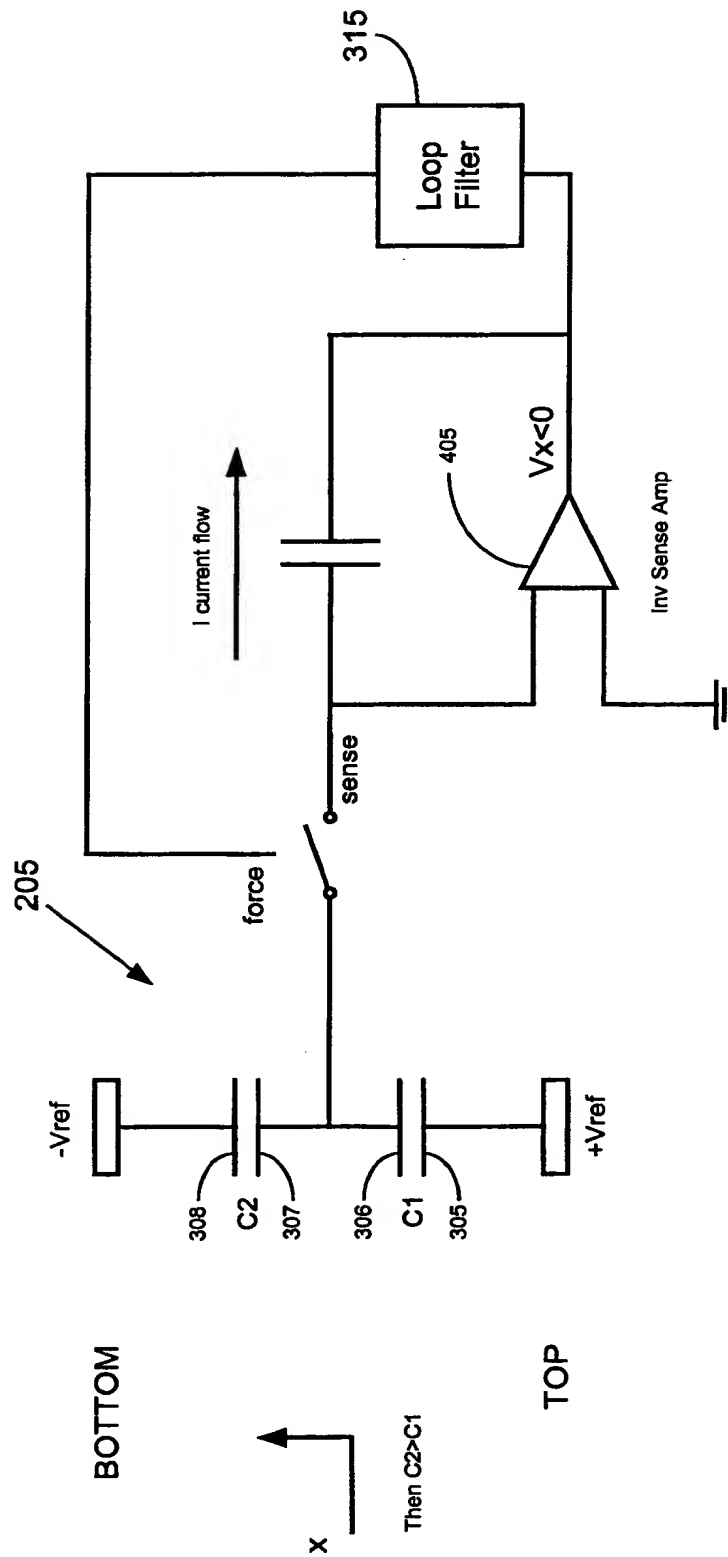


FIGURE 40

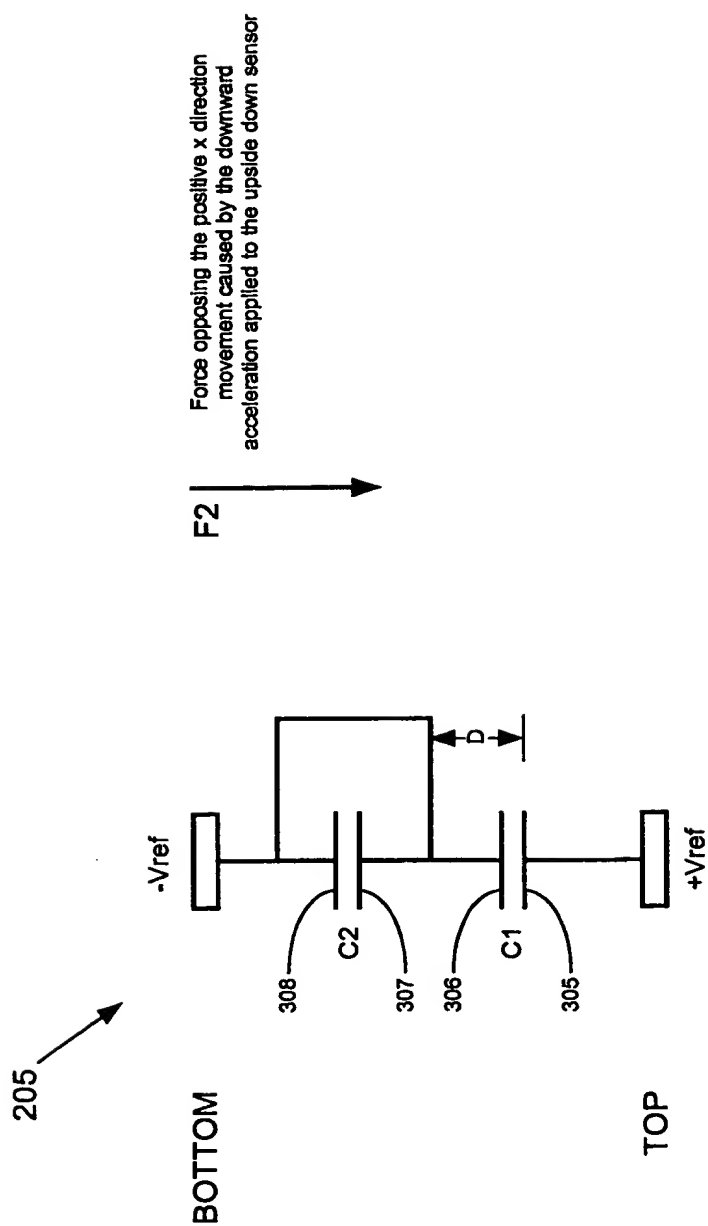


FIGURE 41

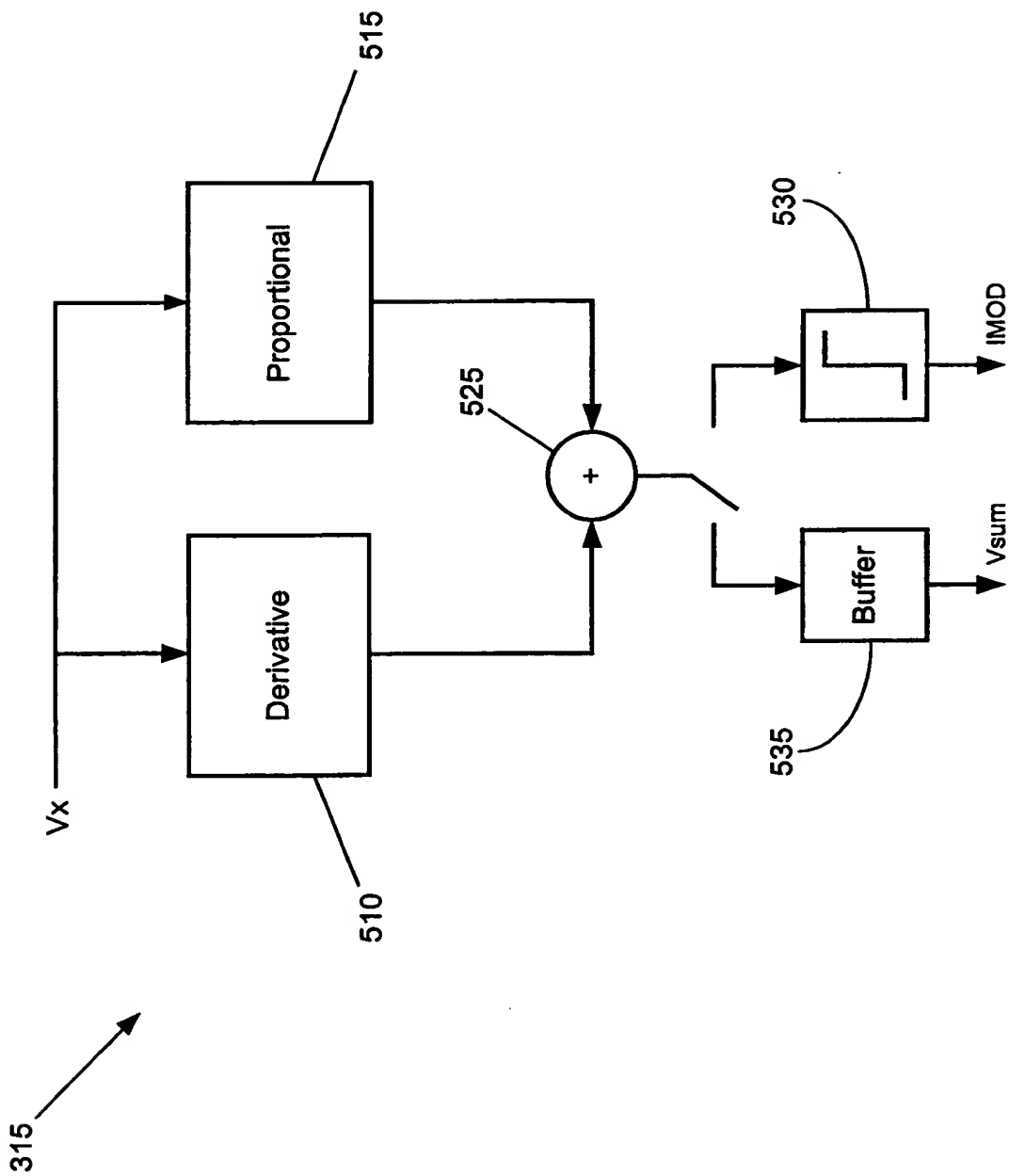


FIGURE 42

4300

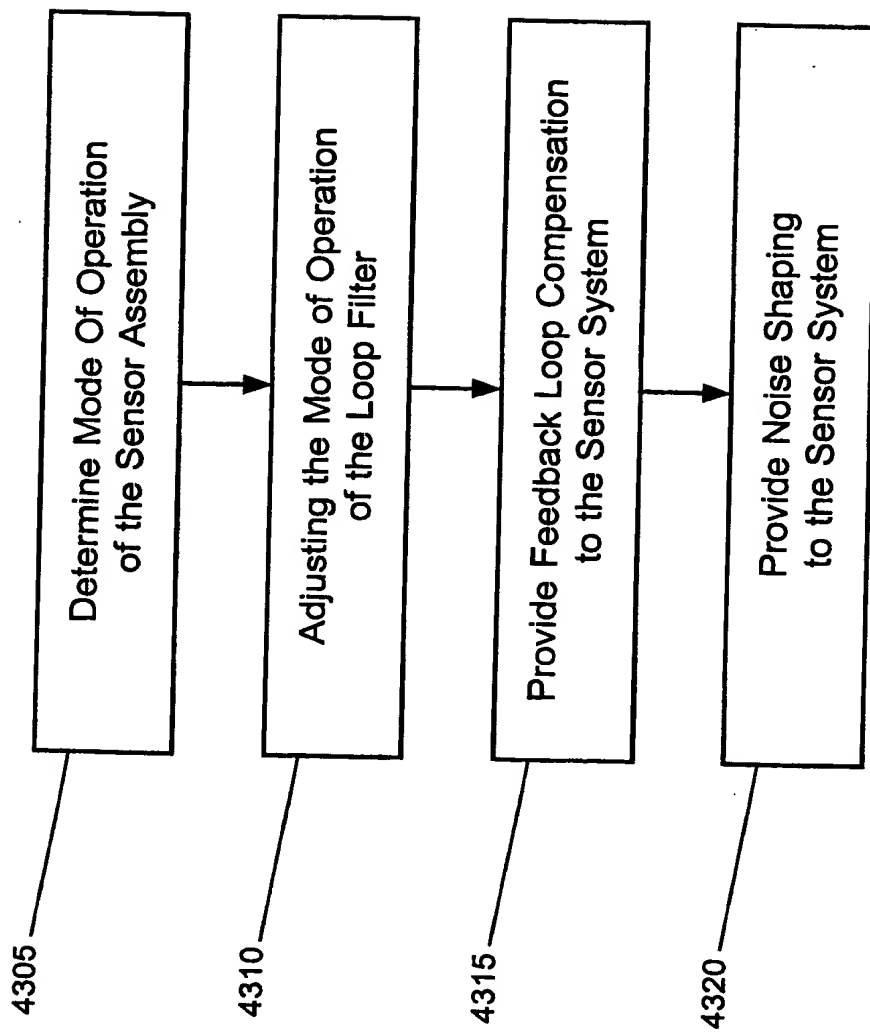


FIGURE 43

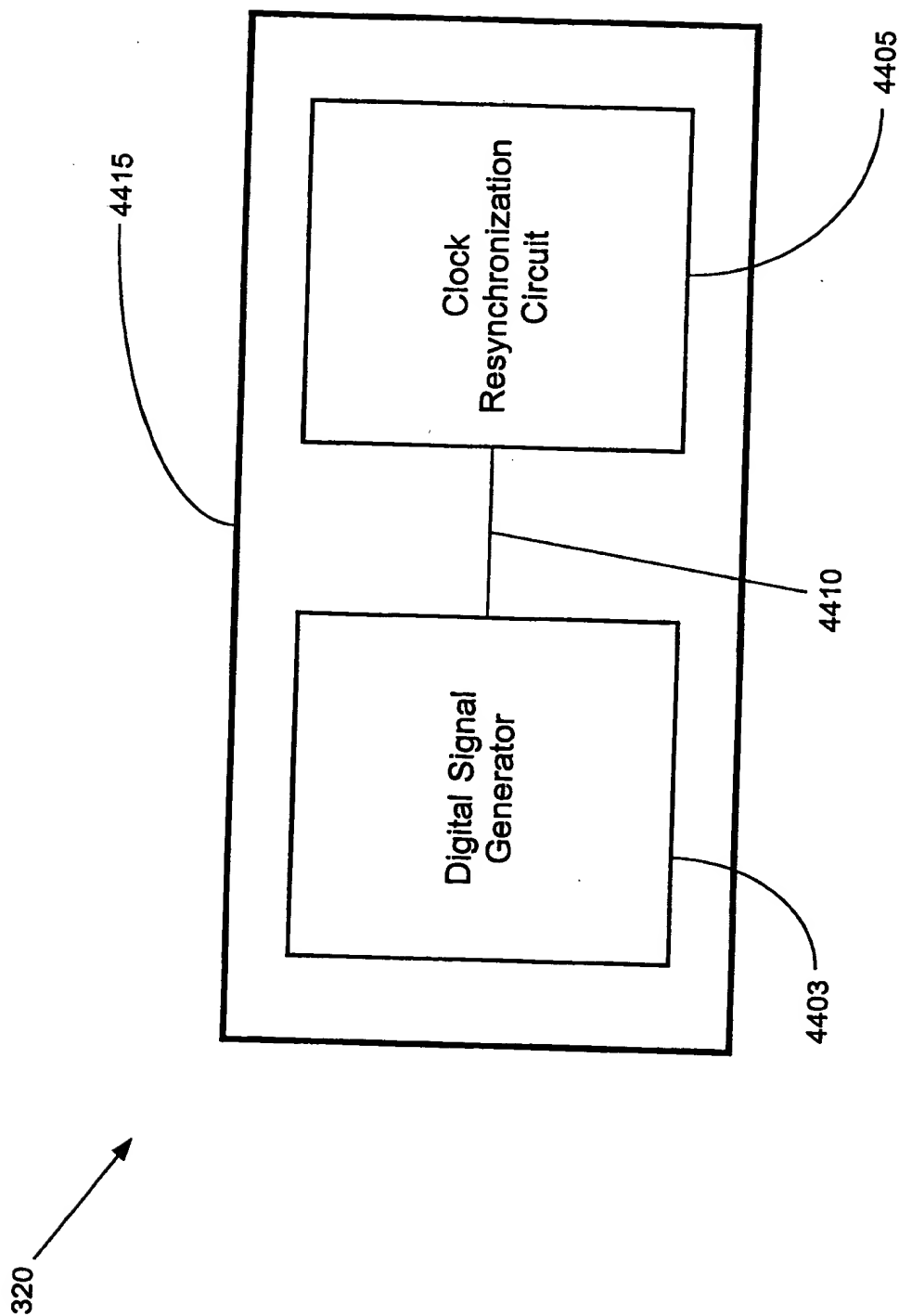


FIGURE 44

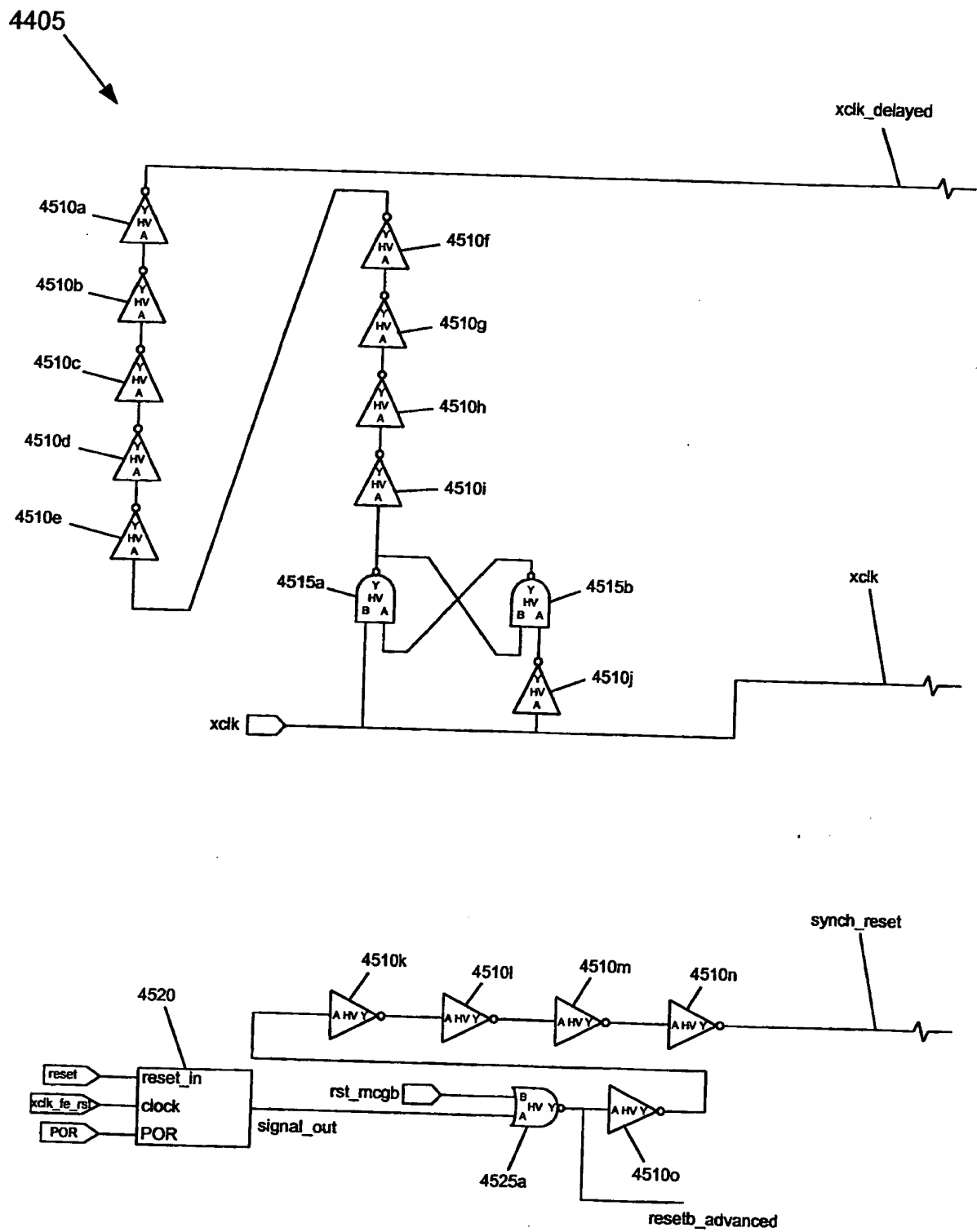


FIGURE 45a

47 / 62

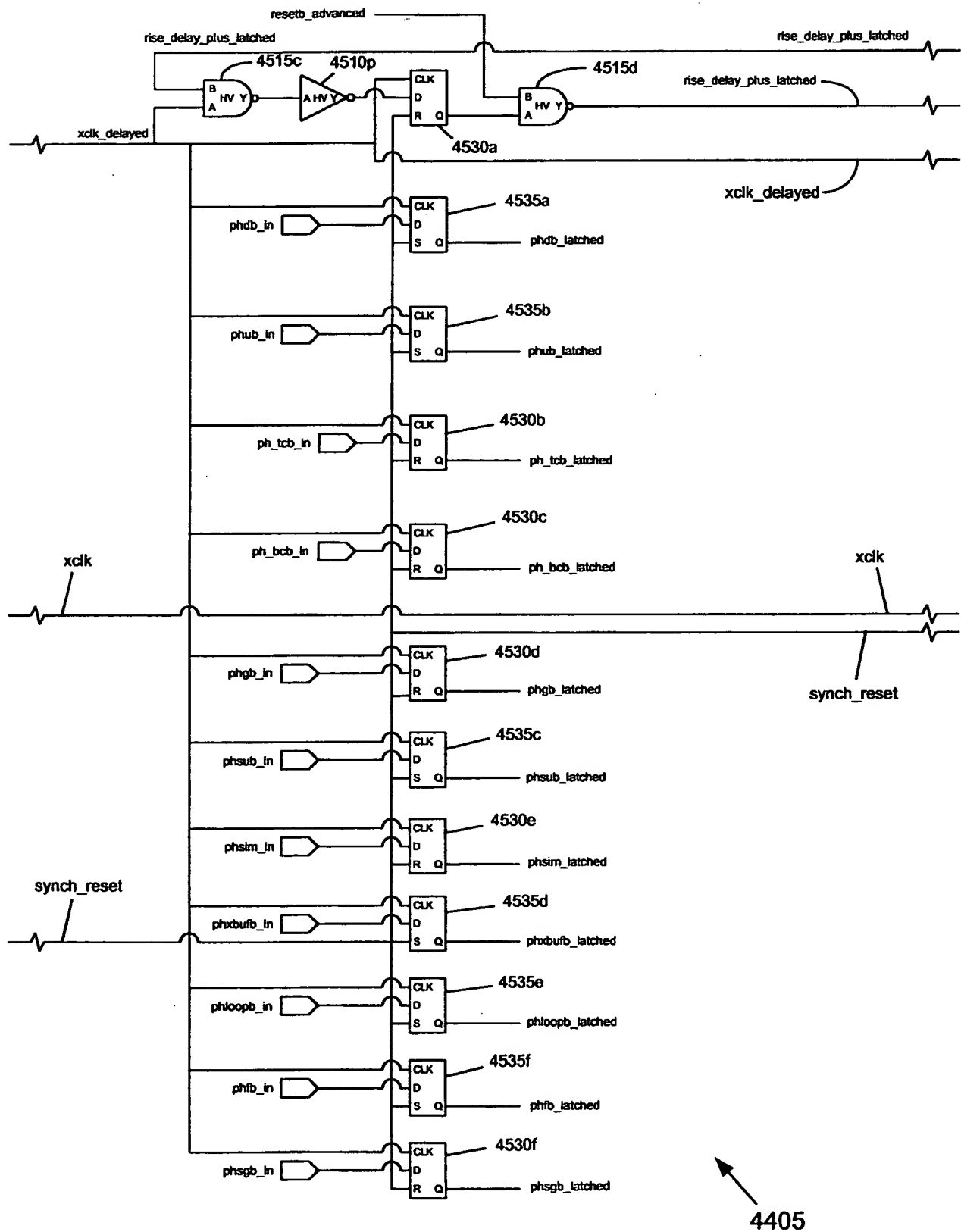


FIGURE 45b

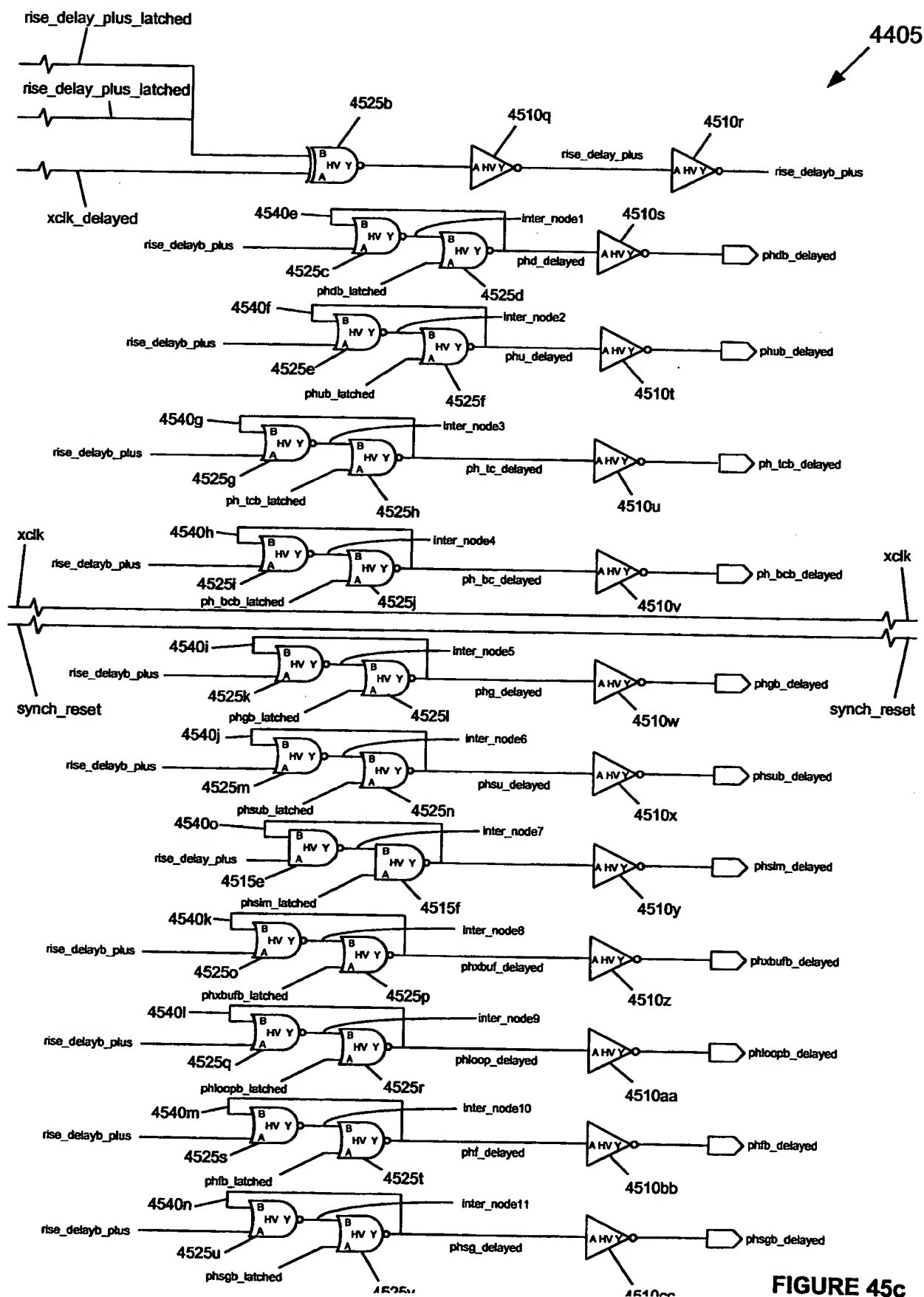


FIGURE 45c

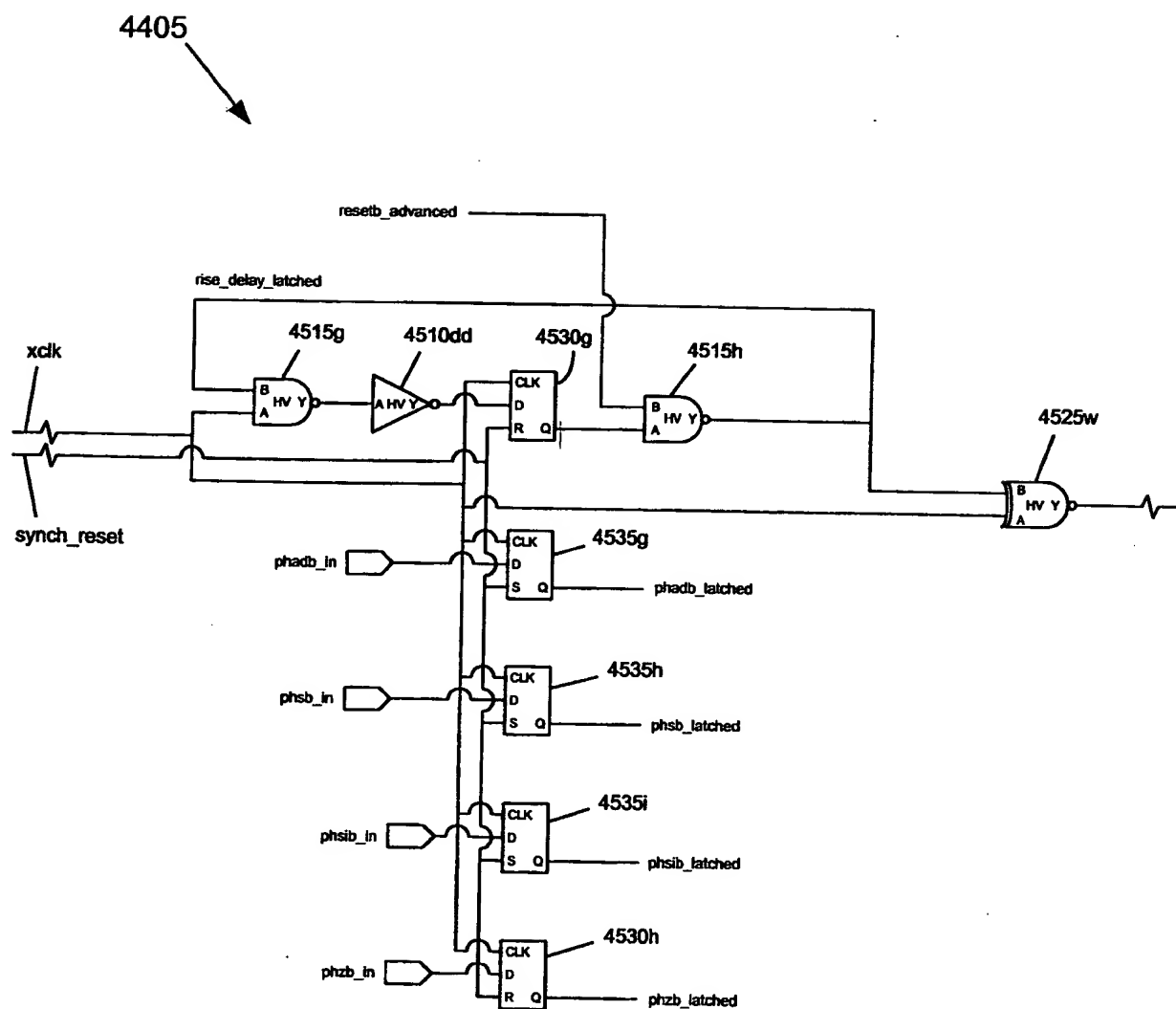


FIGURE 45d

4405

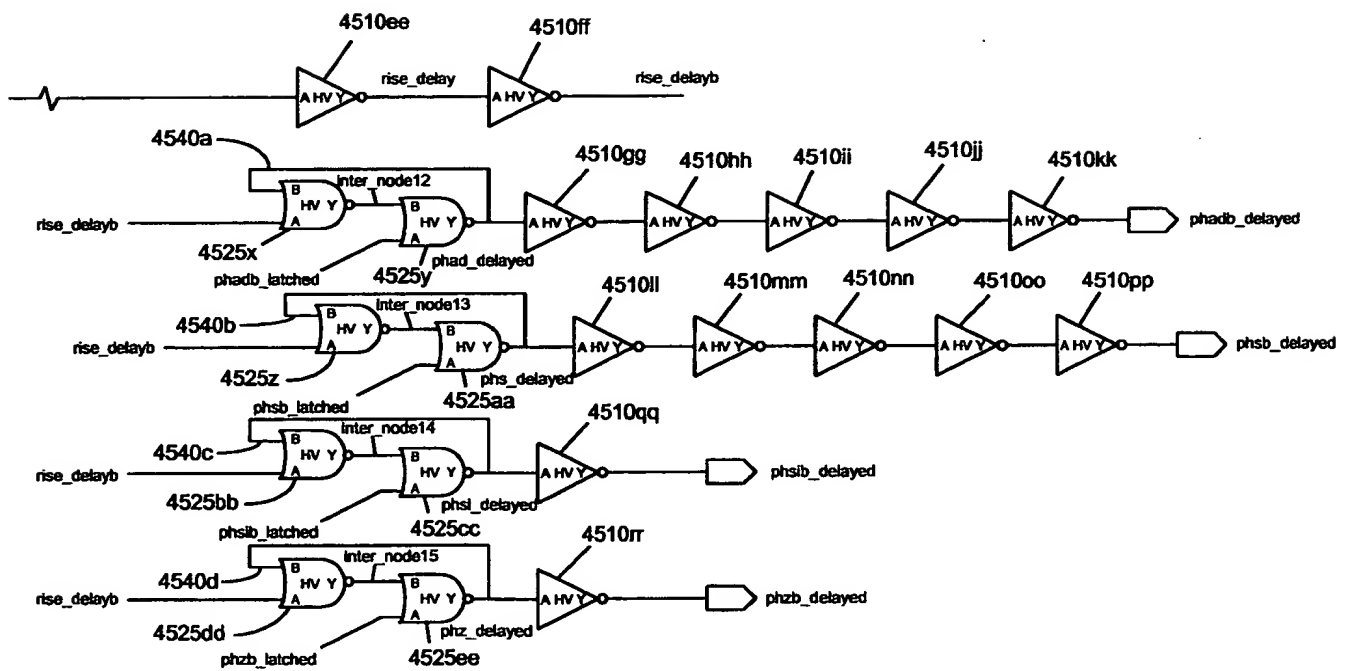


FIGURE 45e

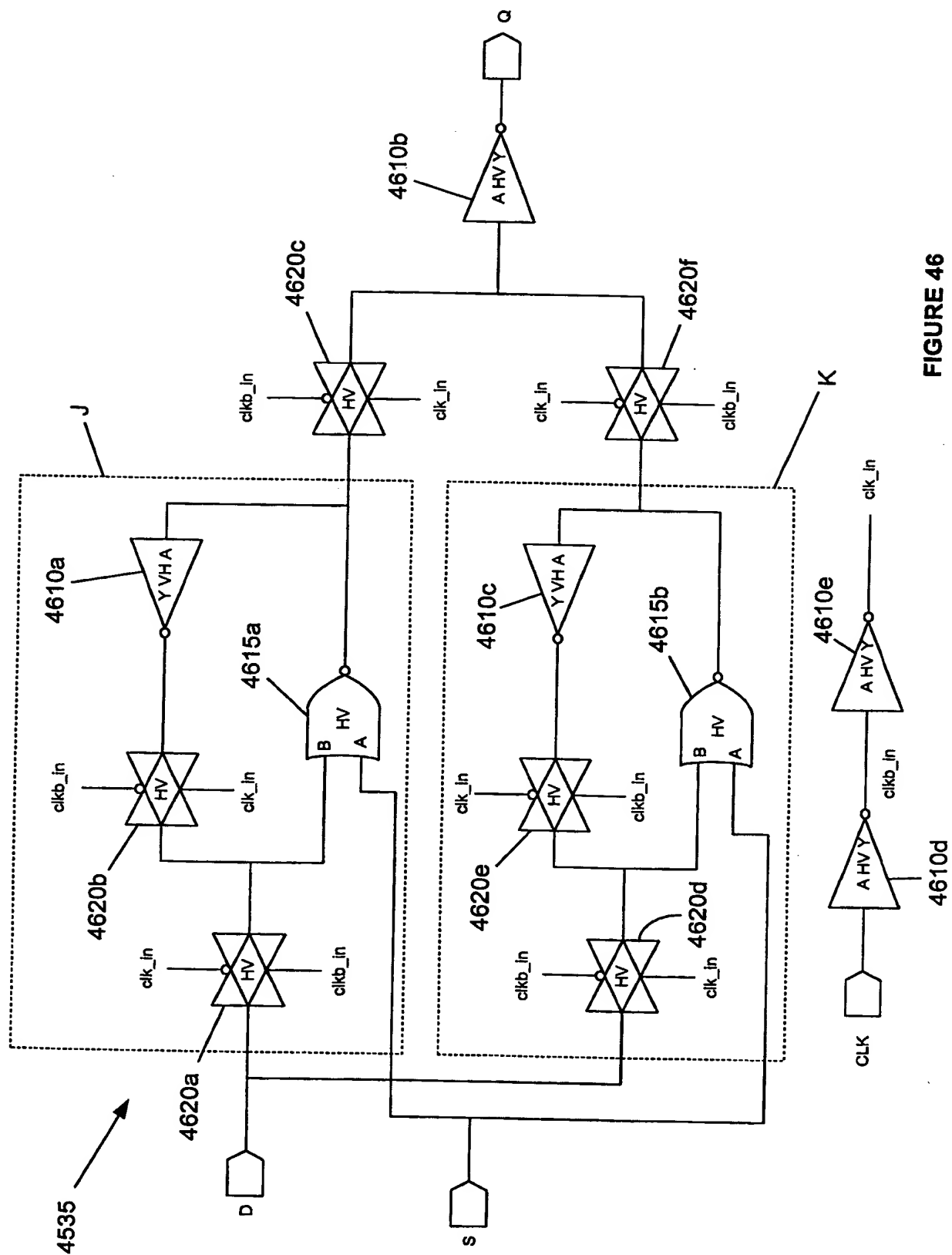


FIGURE 46

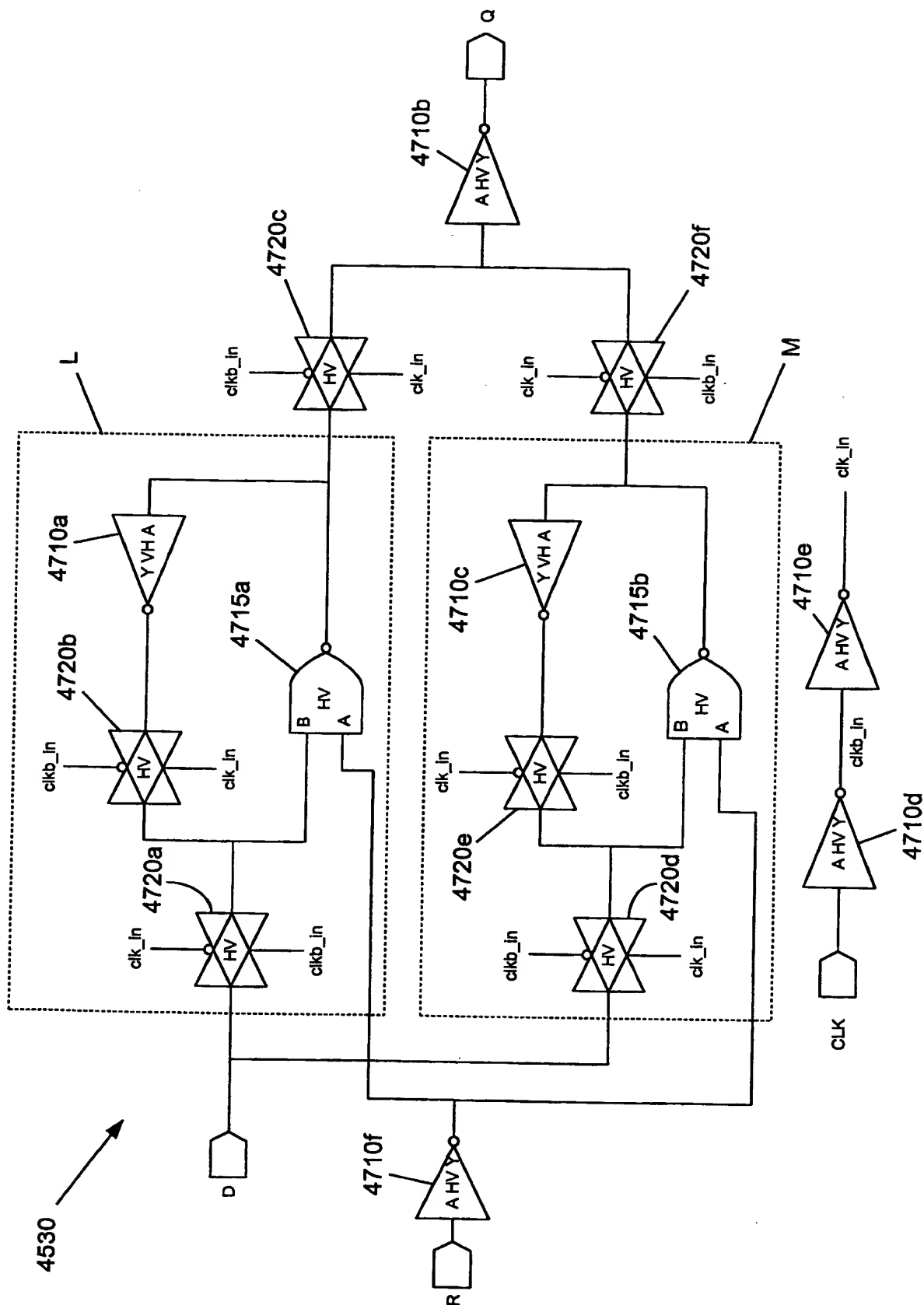


FIGURE 47

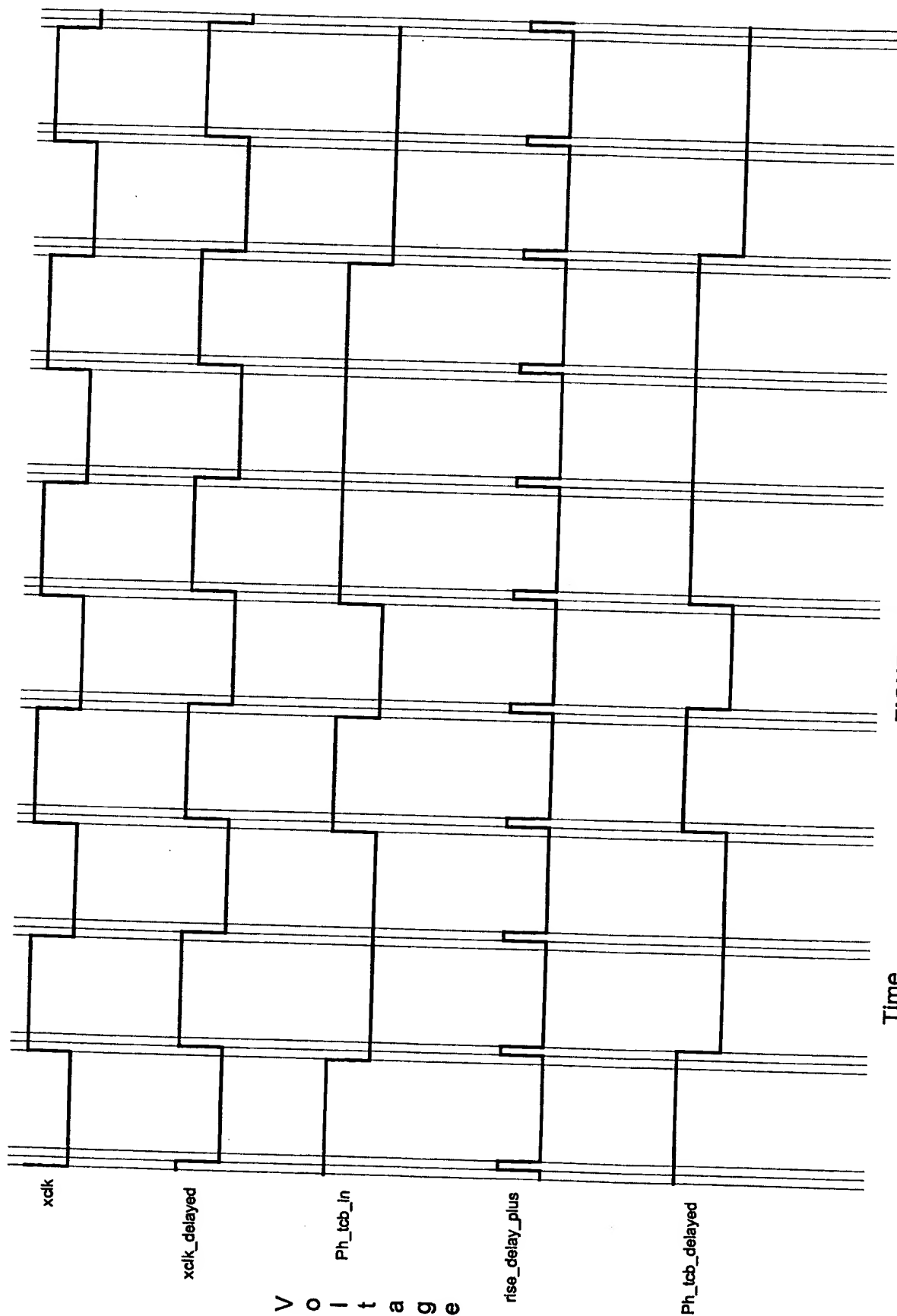


FIGURE 48

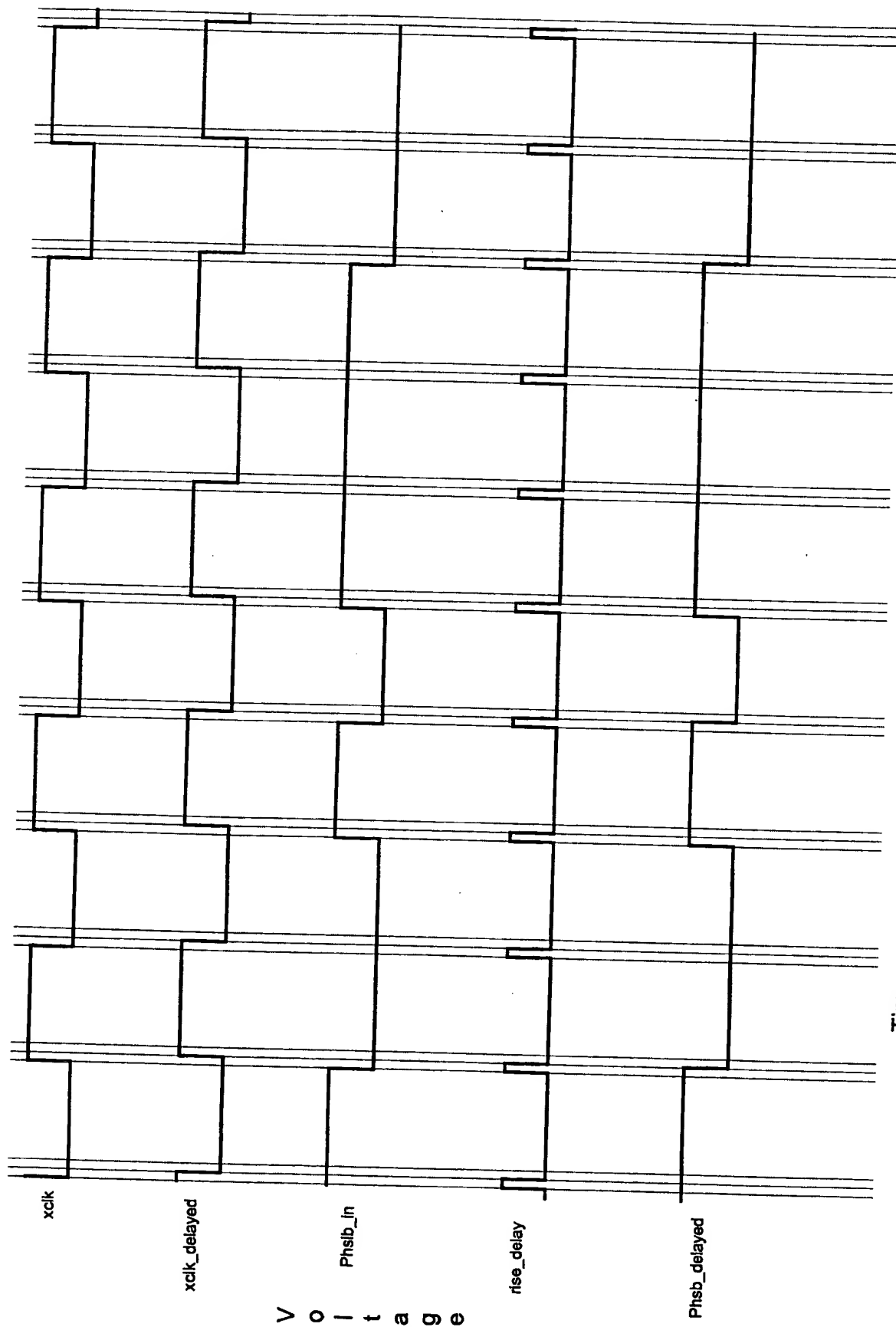


FIGURE 49

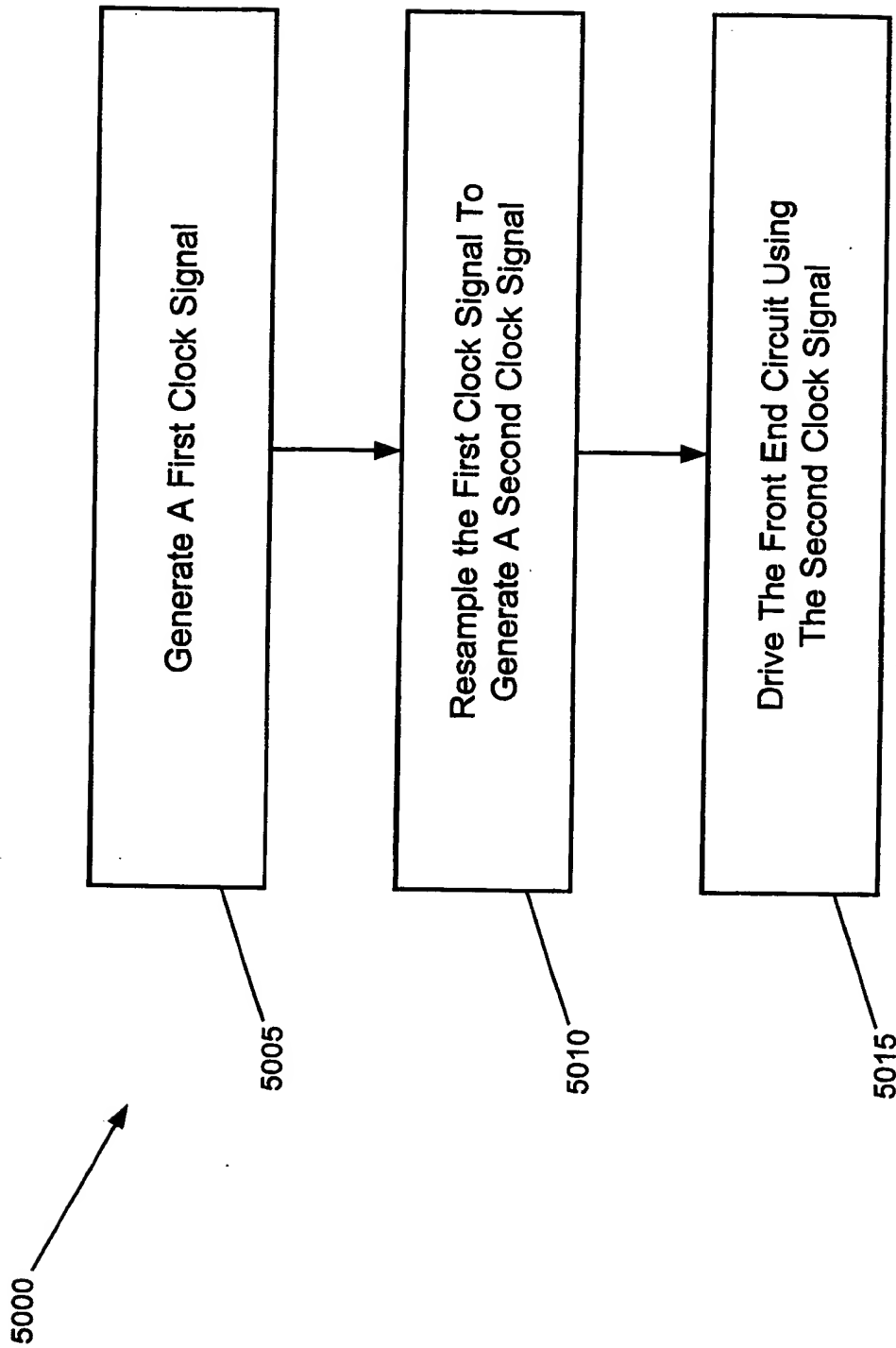


FIGURE 50

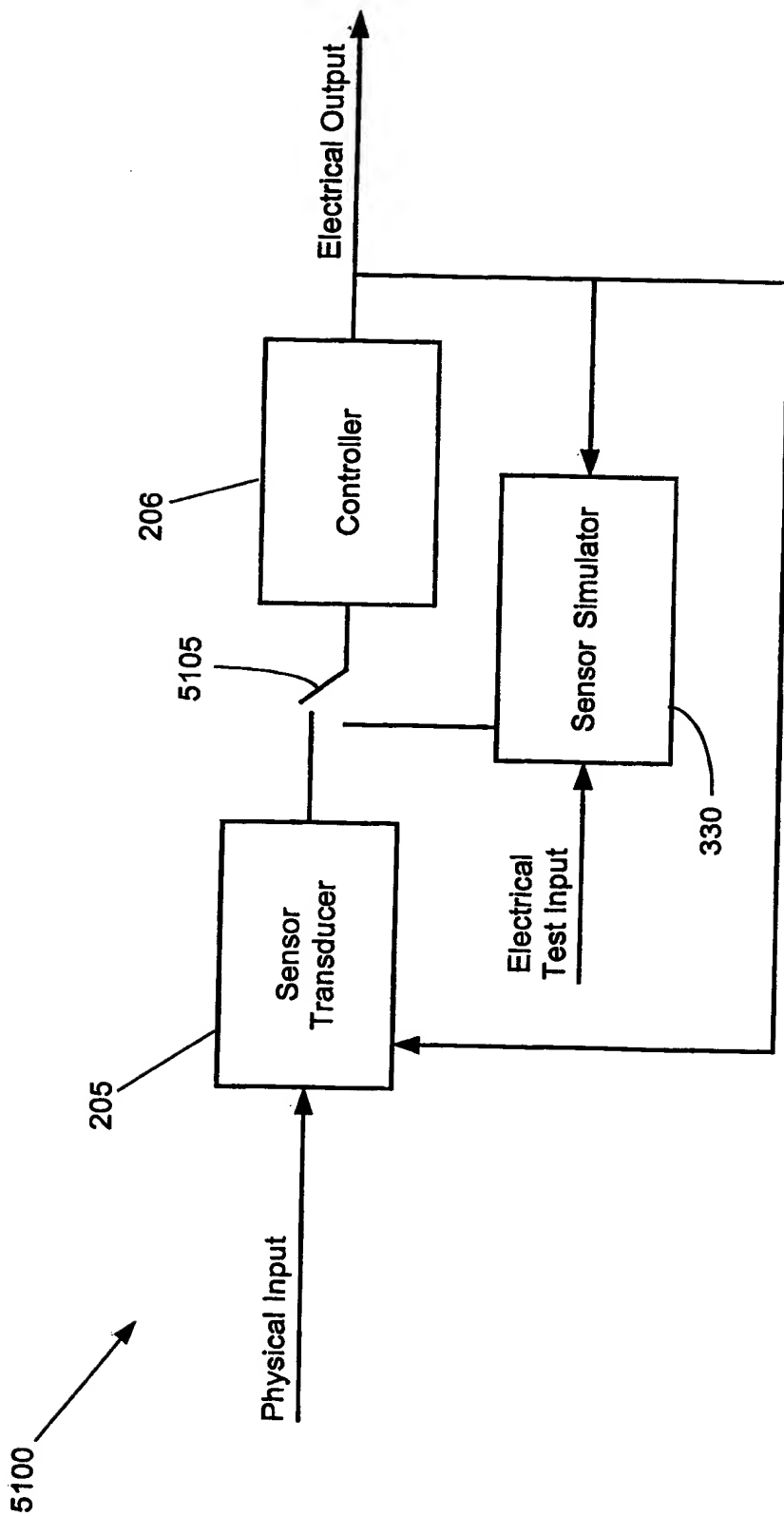


FIGURE 51

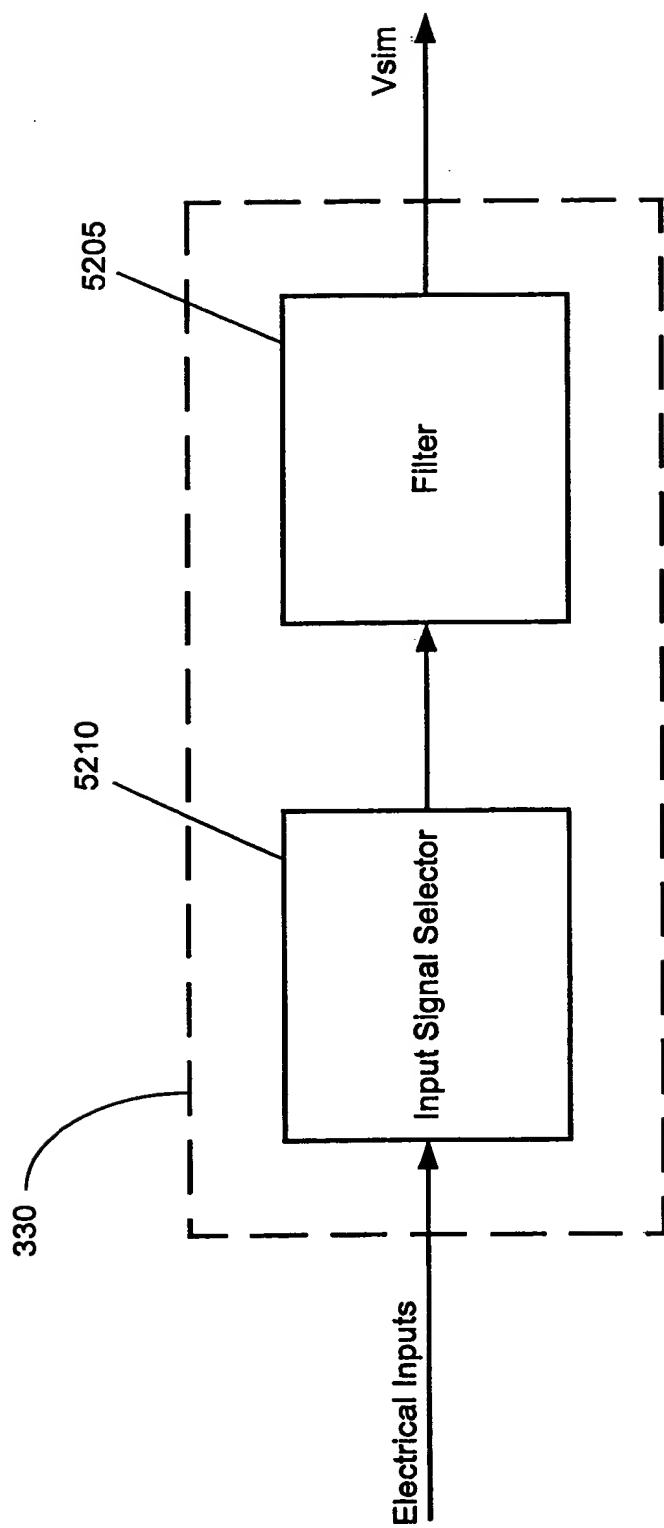


FIGURE 52

5300

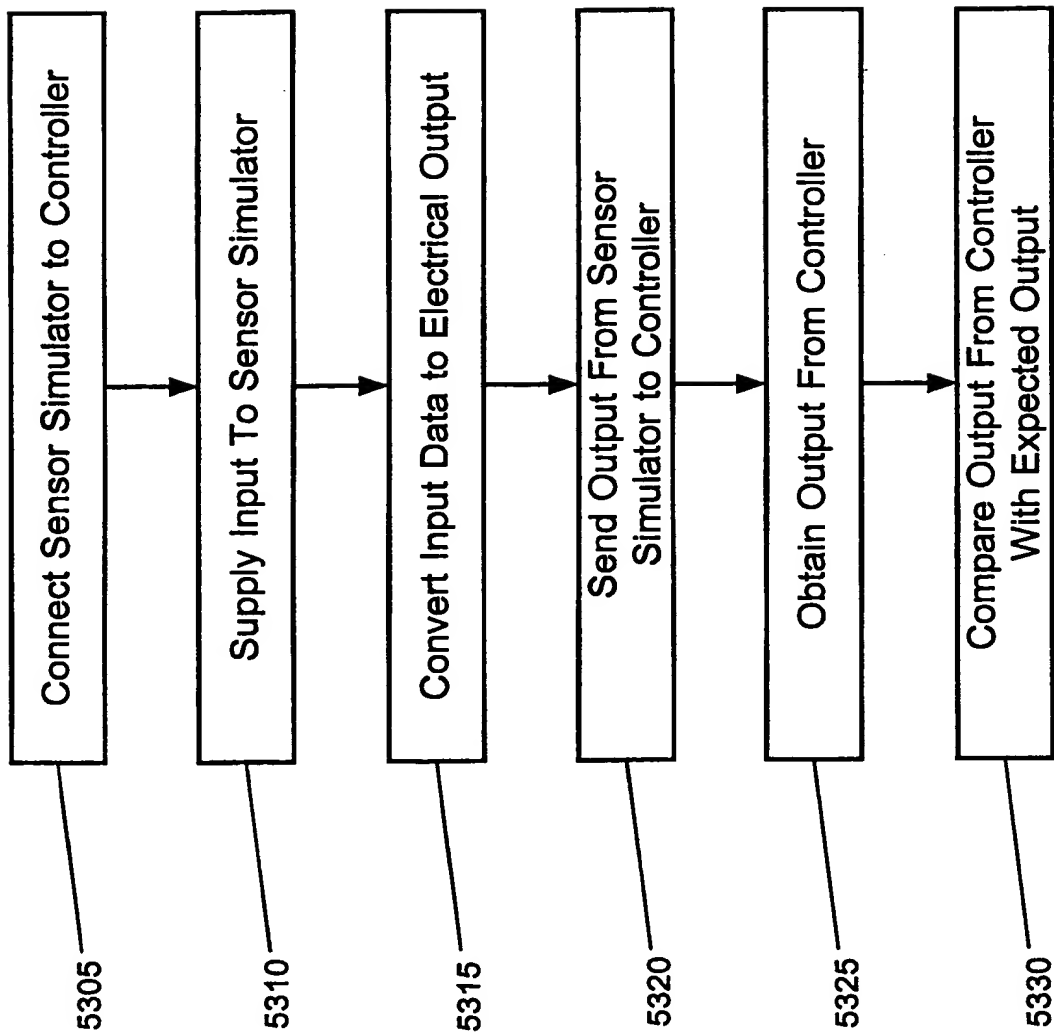
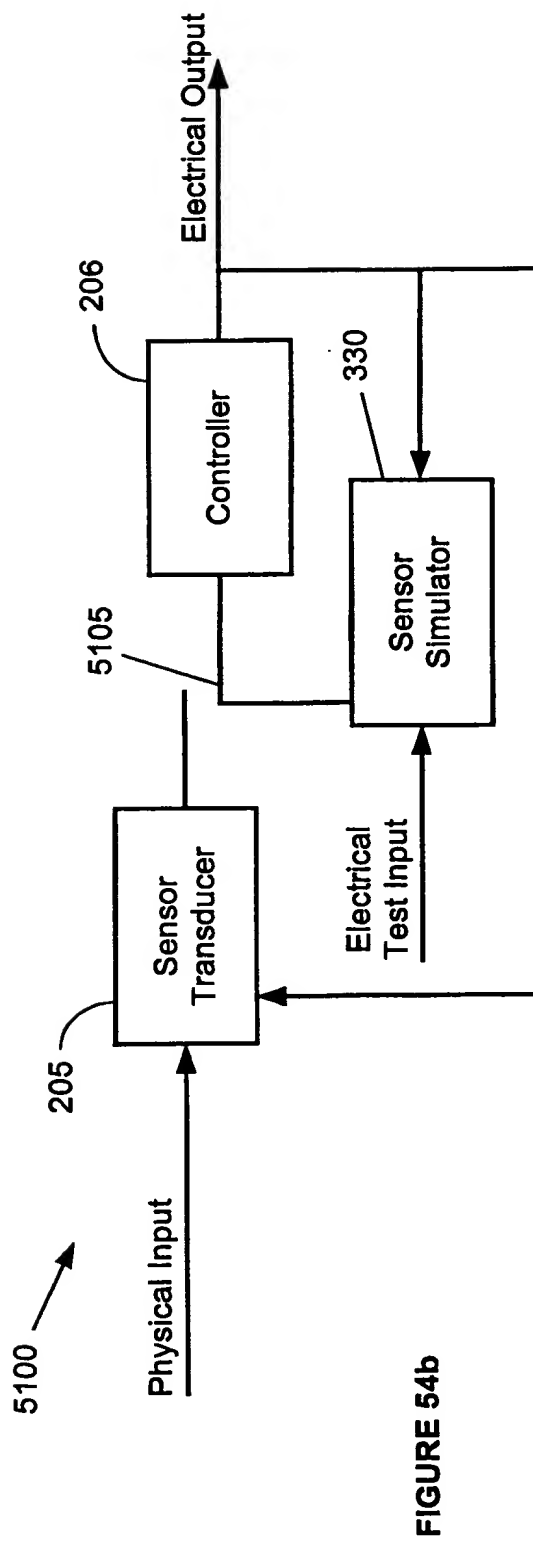
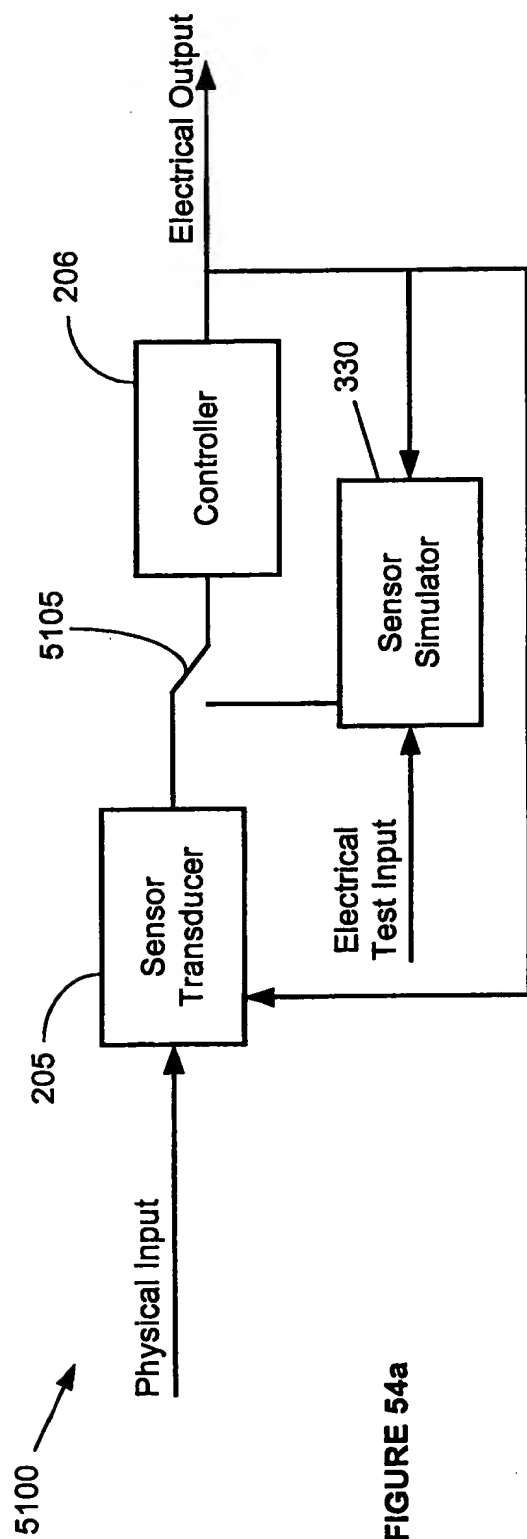


FIGURE 53



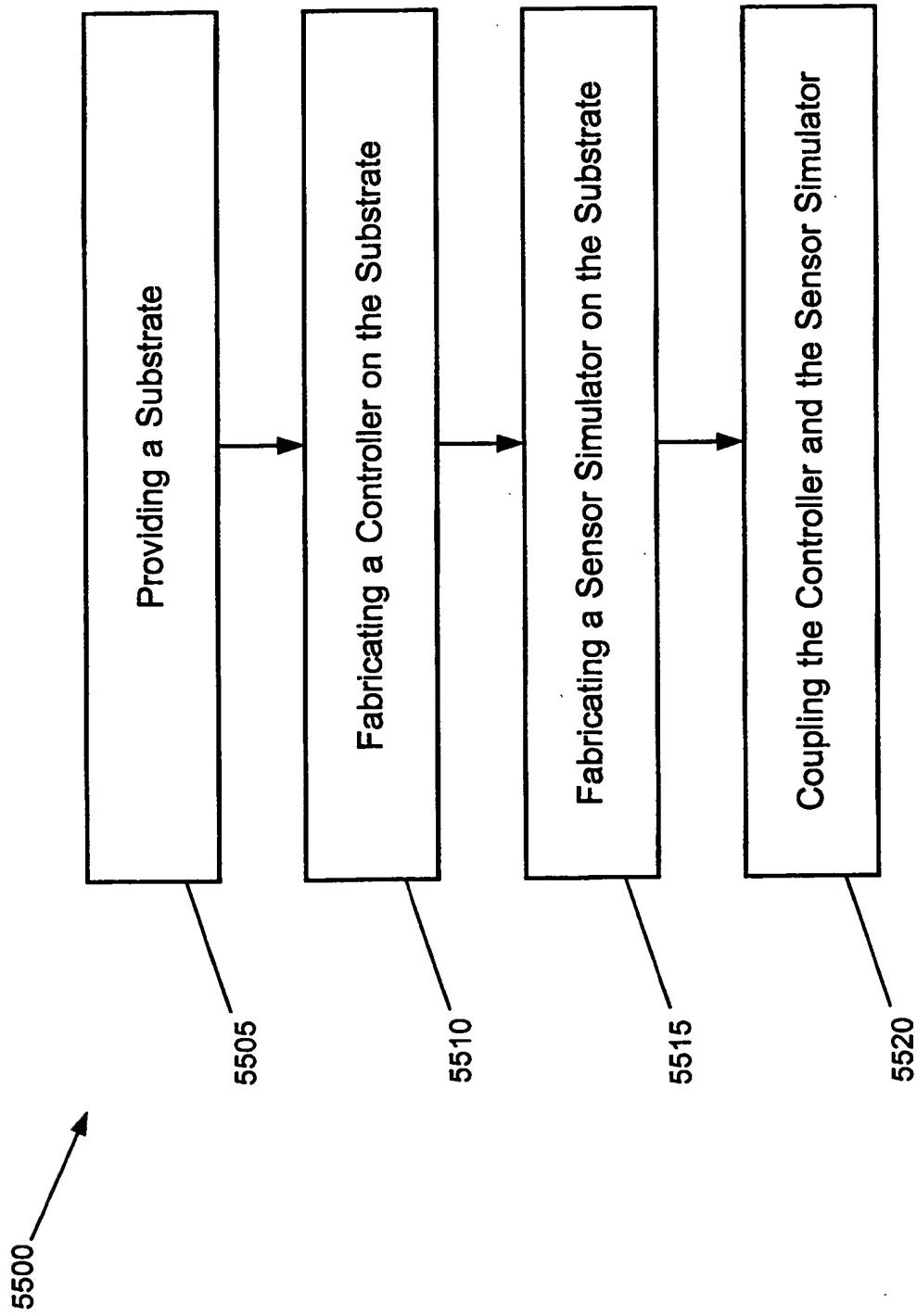


FIGURE 55

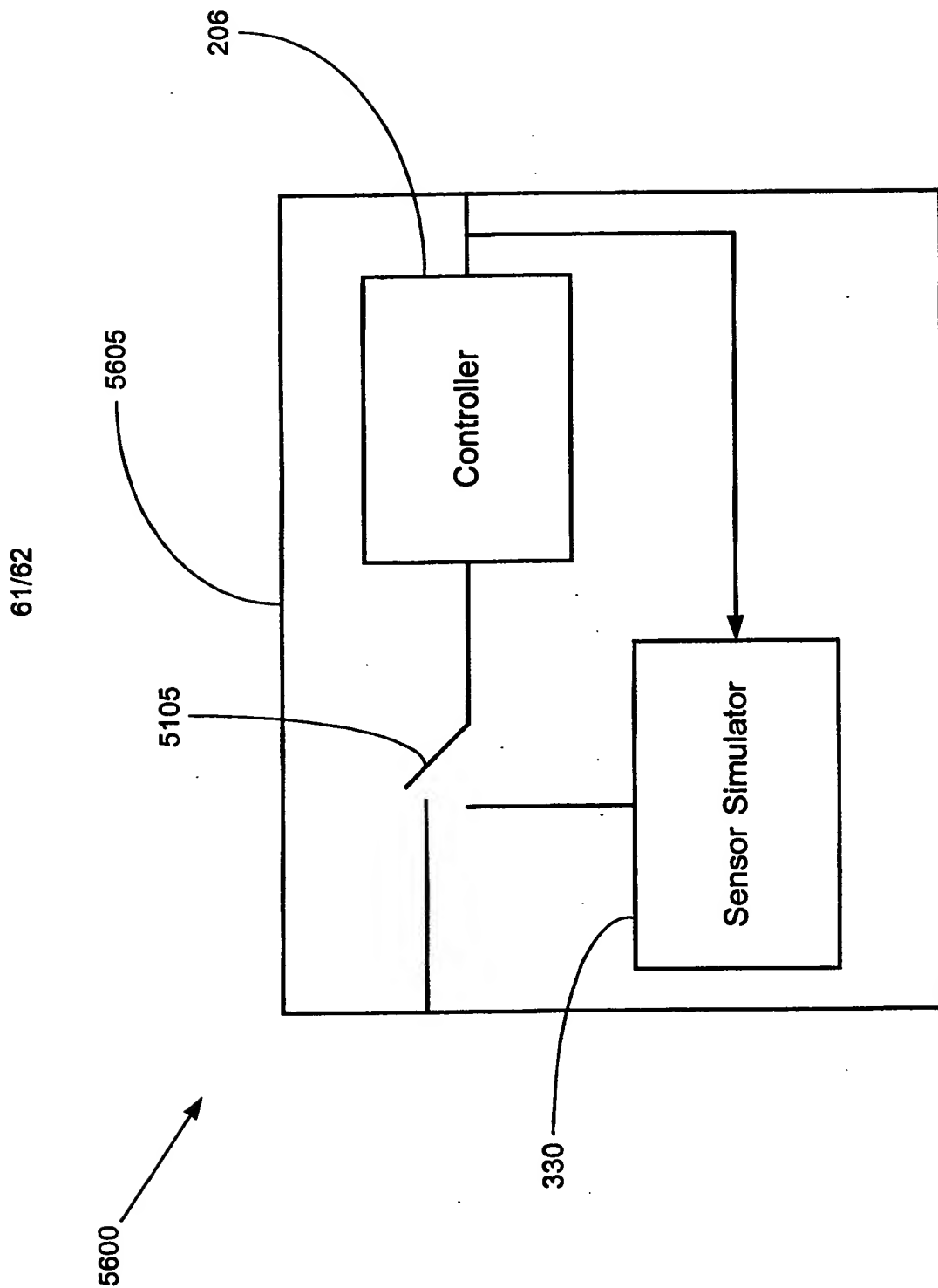


FIGURE 56

62/62

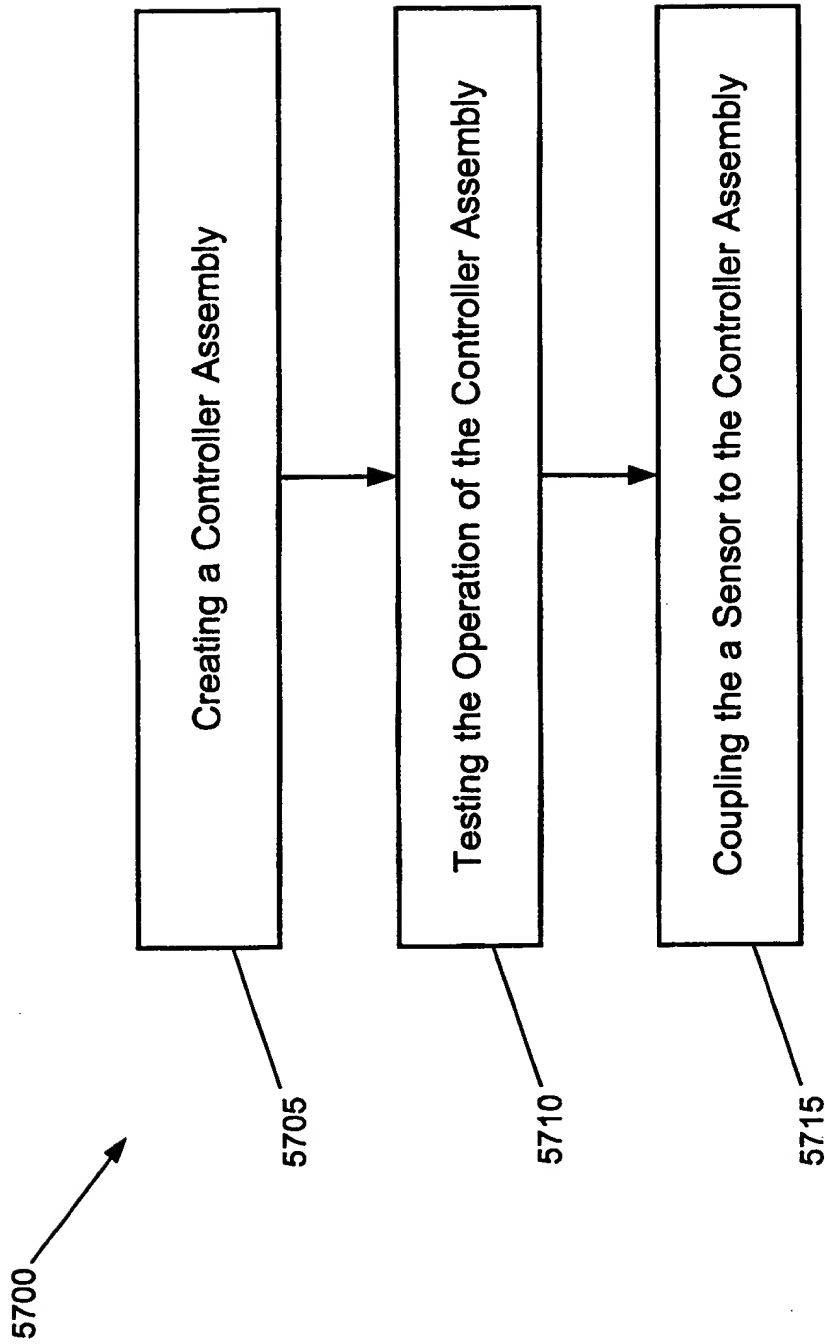


FIGURE 57